California MEDICINE

JUNE, 1948

What's New—A Panel Discussion

OFFICIAL JOURNAL
OF THE CALIFORNIA MEDICAL ASSOCIATION

UME 68 NUMBER 6

put *Summer Safety* in your formula prescription

Adding cooled boiled water to BIOLAC—as her physician directs—is the only precaution that a vacation-minded mother need take when preparing her infant's formula during the summer months. This simple procedure not only facilitates formula preparation, but also minimizes the possibilities either of contamination under adverse travel or resort conditions, or the chance omission of needed vitamins, carbohydrates or iron. BIOLAC, when supplemented by vitamin C, is a complete infant food. In readily assimilable form, it dependably provides all the essential proteins, vitamins, minerals, carbohydrates and other nutritional factors needed for optimum health.

Biolac dilution is easily calculated—quickly prepared: 1 fl. oz. Biolac to 1½ fl. oz. water per pound of body weight.

Biolac is a liquid modified milk, prepared from whole and skim milk, with added lactose, and fortified with thiamine, concentrates of vitamins A and D from cod liver oil, and iron citrate; only vitamin C supplementation is necessary. Evaporated, homogenized and sterilized. Available in 13 fl. oz. tins at drugstores everywhere.

BORDEN'S PRESCRIPTION PRODUCTS DIVISION
350 MADISON AVENUE. NEW YORK 17. N. Y.

Biolac

"Baby Talk" for a Good Square Meal

California MEDICINE

OFFICIAL JOURNAL OF THE CALIFORNIA MEDICAL ASSOCIATION

VOL. 68 JUNE, 1948 No. 6

What's New in Endocrinology

GEORGE W. THORN, M.D., *Boston*

ADVANCES in endocrinology might be considered under the following categories: (1) Discovery of new hormones; (2) modification of existing hormone preparations; (3) increased understanding of the physiological and pharmacological action of the hormones in the body; and (4) clinical uses. Regarding the latter aspect, it is important to consider that, in general, hormone preparations may be used for their therapeutic effectiveness in correcting an existing deficiency or for their pharmacological action by increasing beyond normal the level of circulating hormone. In the latter instance, it is obvious that the effectiveness of a given quantity of hormone will vary over a period of time depending upon the subsequent inhibition of the individual's own natural hormone production; whereas in the deficiency states, a given dose of hormone may be expected to provide a definite physiological action for an indefinite period of time. Finally, there is a new field developing in which nonhormonal preparations may augment or depress hormonal secretion and action within the body.

Anterior Pituitary Gland: One of the most exciting and interesting recent developments has been the clinical confirmation of the experimental observation that the anterior pituitary gland may respond to a variety of stimulating agents and in turn initiate the increased secretion of glands such as the thyroid and adrenal cortex. The preparation, within the past year, of quantities of purified pituitary adrenocorticotropic hormone (ACTH) adequate for clinical investigation represents a great step forward and follows upon the pioneer work carried out in this field by Dr. Herbert M. Evans and his group in this community. The large-scale production of this hormone has been accomplished by the Armour Laboratories, and we have had an opportunity to test this material in a variety of clinical conditions. The response of the intact adrenal gland to a single small dose of ACTH appears to provide a simple test of adrenal cortical function. It has been observed that a prompt fall in circulating eosinophils in the blood and a rise in the uric acid-creatinine ratio in the urine follow the liberation of carbohydrate regulating compounds of the adrenal cortex. The test is carried out as follows:

No food is permitted after 8:00 p.m. On the following day water is allowed ad libitum, and in addition 200 cc. of water is given at 6:00 a.m., 8:00 a.m., and 10:00 a.m. A control urine specimen is collected between 6:00 a.m. and 8:00 a.m., and an eosinophil count is done at 8:00 a.m. Immediately thereafter 25 mg. of ACTH is injected intramuscularly. Urine is collected from 9:00 a.m. to noon, and the eosinophil count is repeated at noon. The percentile decrease in circulating eosinophils is calculated, the two urine specimens are analyzed for uric acid and creatinine, and the uric acid-creatinine ratio is computed.

Studies in man indicate that this preparation of ACTH stimulates the production of adrenal cortical hormone having all of the known physiological actions of the adrenal cortex, i.e. electrolyte regulation, carbohydrate, protein, and fat regulation, androgenic function, and regulation of lymphoid tissue.

In addition, studies in our laboratory indicate that a small dose of epinephrine (0.2 mg.) infused slowly over a period of one hour is sufficient to stimulate the anterior pituitary of a normal individual to release endogenous ACTH and to result in increased adrenal hormone secretion. Failure to obtain such a response suggests anterior pituitary failure; whereas failure to obtain a response to ACTH suggests adrenal cortical failure. It is also evident that with the use of purified ACTH it may be possible to explore a wide variety of disease states for evidence of adequate adrenal cortical function and thus for the first time obtain objective evidence of relative adrenal cortical deficiency in states other than Addison's disease and chronic adrenal cortical insufficiency.

Parathyroid Glands: Treatment of acute hypoparathyroidism is best accomplished by the simultaneous administration of calcium intravenously, parathormone intramuscularly and AT-10 (Hytakerol, Winthrop). The first of these (intravenous calcium) acts

Read as a part of Panel Discussion of What's New before the general meeting at the 77th Annual Session of the California Medical Association in San Francisco, April 11-14, 1948.

immediately but persists only a few hours. The second (intramuscular parathormone) acts within an hour and may last for six to twelve hours. The vitamin-like preparation takes several days for maximum effect and is ideal for long-term management.

It is important to reiterate at this time that there is no indication that tetany due solely to hyperventilation is associated with any measurable change in ionized calcium in the blood.

Finally, it is possible that in patients with early hyperparathyroidism without renal involvement one may find a decreased response to parathormone administered intravenously. The measurement of this effect is based upon the phosphorus excretion in the urine.

Thyroid Gland: It is important to point out at this time that thiouracil in combination with iodine represents a great advance in preoperative preparation of patients with thyrotoxicosis who are to undergo surgical operation. Propyl-thiouracil (Lederle) with or without iodine may be employed as a medical treatment for thyrotoxicosis, as may radioactive iodine. It should be appreciated, however, that although excellent clinical results may be obtained in properly selected patients, both of these forms of treatment must still be considered in the experimental stage and cannot be assessed as yet for final evaluation. It therefore becomes the duty of everyone who employs such methods of treatment to make careful observations on the initial diagnosis and the course of the disease following therapy. It is obvious to all that there has been no new approach to the management and cure of thyrotoxicosis, since surgical operation, thiouracil, and radioactive iodine all attempt to control the disease by reducing the capacity of the end-organ to respond. Although great success can be claimed for such an approach, it obviously does not attack the fundamental problem of the abnormality initiating increased thyroid activity.

Thymus Gland: Evidence continues to be obtained that the removal of the thymus gland in certain patients with myasthenia gravis either modifies the progressive course of the disease or, in more favorable instances, results in a prolonged remission.

Pancreas: The usefulness of shorter acting insulins such as globin and modified protamine appears well established. It is hoped that for the sake of good patient care and protection of the physician an unlimited supply of intermediate forms of insulin will not be made available. It should be possible to regulate most diabetics with either crystalline, globin, modified protamine, or protamine insulin either singly or in combination. Recent reports on pancreatic extracts from alloxan treated animals in which presumably the beta cells of the islets have been destroyed and in which the alpha cells persist, suggest that the alpha cells may liberate a hormone with glycogenolytic properties. Certainly it is evident that total pancreatectomy in a patient with diabetes mellitus does not aggravate the diabetes appreciably.

In the management of patients with diabetic coma who are unable to take food within a relatively short period of time or who have had poor regulation of diabetes over a prolonged period, the usefulness of solutions containing potassium and phosphate is well appreciated.*

Adrenal Steroids: Methods for synthesizing 11-oxy adrenal steroids (Kendall's Compounds A and B) and 11-17-oxy steroids (Kendall's Compounds E and F) are now available. Unfortunately, the large number of chemical steps involved, the relatively low yields, and therefore the high cost of preparation have delayed the synthesis of any large quantities of these interesting hormones.

Gonads: Perhaps the most exciting and interesting recent advance in this field is the use of sex hormones in the treatment of certain forms of cancer. Castration and/or estrogen therapy have proved useful in the management of advanced prostatic cancer. Nathanson's and Adair's studies indicate the usefulness of testosterone therapy in bony metastases from breast tumors in females and the possible advantage of estrogen therapy in selected elderly women with carcinoma of the breast.

Peter Bent Brigham Hospital.

*Potassium Phosphate Solution:

K_2HPO_4 2.0 gm. } K=25 m.eq./l
KH_2PO_4 0.4 gm. } P=14 mM/l
Glucose 60.0 gm.
a.s. ad. 1000 cc. H_2O
To be infused slowly over a period of two hours.

QUESTIONS AND ANSWERS

Question: Dr. Thorn, can ovulation be produced in women by the use of endocrine substances?

DR. THORN: When failure of ovulation is associated with an intact ovary but deficient pituitary-gonadal stimulating hormones, it should be possible to stimulate ovulation with appropriate doses of FSH and LH.

Question: What is the status of the treatment of acromegalic gigantism with reference to estrogen therapy?

DR. THORN: In most instances it appears necessary to employ irradiation of the pituitary gland to control progressive development of acromegaly. Estrogenic therapy might be effective in mild cases or as an adjunct.

Question: Is testosterone indicated after surgical operation on the breast in an elderly patient?

DR. THORN: Testosterone therapy might be considered on one of three bases: (1) Its nitrogen-retaining effect as an aid in postoperative care; (2) replacement therapy in a patient with deficient androgens (male climacteric); and (3) its action on bony metastases. Certainly its use in conditions one and two is justified. It should be considered very much in the experimental stage in condition three.

Question: What may be considered a "subandromimetic" dose of testosterone in females with particular reference to hirsutism?

DR. THORN: There is, of course, wide individual variation in the response of female patients to testosterone. In general, however, 10 mg. of methyl testosterone per day by mouth for three to four months may be considered the upper limit beyond which one would very likely note secondary masculinizing characteristics.

Question: Discuss the anabolic effect of testosterone and testosterone esters.

DR. THORN: In my experience the chief difference is quantitative rather than qualitative, i.e. slower absorption or slower breakdown of esters results in a more prolonged androgenic effect from a given dose of hormone.

What's New in Communicable Diseases

ALBERT G. BOWER, M.D., *Pasadena*

SLUDGED BLOOD—After 16 years of study, Knisely and his associates [17] report that in the experimental animal as well as in the human subject, the following changes are absent in health but present in disease, either induced or naturally occurring: masses of agglutinated red cells (not rouleaux) of different basic sizes and degrees of agglutination appear in the blood vessels, in one or more of the following phenomena: reduction of the rate of blood flow in all open vessels; ingestion of the agglutinated sludge by the fixed tissue, endothelial, physiological phagocytes of the spleen and liver (hemophage cells); the sedimentation and settling out of the agglutinated sludge from the circulating plasma; either temporary or permanent plugging to a varying degree of arterioles and other vessels.

The effects produced in the blood by many different systemtic diseases of different origin, and by severe injuries, were studied in nearly 600 humans. The various lenses of a binocular dissecting microscope were focused on the capiliaries of the eyelid. Every severely sick person showed visible evidence of intravascular sludged blood and abnormal changes in the vessel wall.

This poses the following questions: In the presence of severe infections, in addition to attempting to free the body from invading organisms, must we attempt to prevent blood from sludging, entirely or in part, and if so, what is the best procedure? In addition, what steps may be taken to prevent destruction of normal blood cells, preserve adequate blood volume, prevent thrombi and emboli, and keep vessel walls intact?

Brucellosis.—It has long been known that controlled high blood levels of various members of the sulfonamide drugs will cure acute brucellosis in many cases. However, most patients are treated with inadequate levels without effecting a cure. In such cases, later treatment with sulfonamides inevitably results in failure, the surviving organisms having become entirely resistant.

While streptomycin prevents the growth of the bovine, porcine, and caprine strains of Brucella [14] in vitro, and at a concentration readily achievable in human blood, it has been disappointing in the prevention or treatment of the disease in the experimental animal and in treatment in the human. The combination of sulfonamides with streptomycin in treatment appears to be successful.[10, 21] From present data it appears that streptomycin should be given in 0.5 gm. doses every six hours for seven days only. Concurrently, sulfadiazine is given in an initial dose of 4 gm., to be followed by 2 gm. every four hours thereafter for at least two weeks and preferably three. Our comment is that we prefer equal parts of sulfadiazine and sulfamerazine to either drug alone, and we believe that the blood level should be maintained at 15 mg. per cent or higher and the urinary pH kept at 7.4 or higher.

Vaccination against cholera produces antibodies that give a positive agglutination against Brucella organisms.[11] This should be taken into account in doing agglutination tests.

The inability to secure positive agglutination tests in many bacteriologically proven cases of brucellosis is well known. Absent or low agglutination may be due to the presence of blocking antibodies in the patient's blood, and upon their removal either the test becomes positive or the positive titer rises. Using rabbit or bovine sera entirely to replace all saline solution as a diluent for titrations, or as a suspending medium for the bacilli, causes the disappearance of these blocking antibodies.

Spencer's Disease.—This disease is variously known as intestinal "flu," epidemic nausea and vomiting, epidemic gastro-enteritis, "virus X," and what not. It is high time the profession settled on one name so that reports from different parts of the country will be clearly understood to denote the same clinical entity. Though long known in the East, it appears to have been relatively infrequent there until the war years. In California it has been endemic, with regularly recurring epidemics, for at least 35 years. It occurs principally in children, in annual fall and winter epidemics of variable proportions. Recently the disease was produced in humans experimentally by the oral feeding of throat washings and fecal filtrates,[13] proving it to be due to a filtrable virus, at least in this one particular Eastern epidemic.

Infectious Mononucleosis.—Before 1935, this was relatively a rare disease in California. Since that time it has become increasingly common, and at present enters into the differential diagnosis of most communicable diseases and all bizarre fevers. Severe anginose types may be distinguished from pharyngeal diphtheria only by the laboratory: the patients look, smell and act as though suffering severe diphtheria. However, cultures are persistently negative, and in time the typical Downey cell lymphocytes appear and the heterophile test becomes positive. A large spleen and enlarged lymph glands are suggestive. The systemic or typhoidal type may be impossible to diagnose for several weeks, the disease meanwhile resembling bacterial endocarditis, brucellosis, typhoid malaria, Q fever, intermittent fever, and other entities. Rose spots frequently appear on the skin, and the spleen enlarges. The morphological blood picture is variable, inconsistent and confusing, and often

Read as a part of the Panel Discussion of What's New before the general meeting at the 77th Annual Session of the California Medical Association in San Francisco, April 11-14, 1948.

many days elapse before it becomes diagnostic. This is also true of the heterophile test. Incidentally, the heterophile test should be checked by absorption against false positives if the patient has received any serum. Results of blood cultures and Widal's test are negative.

In a recent autopsy study of a patient who was accidentally killed,[1] the disease was shown to have produced lesions of a focal infiltrative type in the brain, heart, lungs, spleen, adrenals, and testes. So far as the author is aware, this is the first report of lesions in the brain, although infrequently in clinical cases a meningeal picture or a Guillain-Barre syndrome does occur. Ruptured spleen is a common concomitant of the disease. In differential diagnosis the disease is often mistaken for infectious hepatitis. Pooled human convalescent scarlet fever serum, or immune serum globulin (gamma globulin) favorably alters its clinical course.

Infectious Lymphocytosis.—This entity unquestionably occurs more frequently than it is reported. The author observed three hospital cases last year. The lymphocyte count usually varies from 40 to 95 per cent of the total leukocyte count, which runs from 40,000 to 150,000. The lymphocytes are small to intermediate in size, being predominantly mature with nuclei of coarse, dark-staining, chromatic material, and with scant basophilic cytoplasm. These cells do not resemble the characteristic cells of infectious mononucleosis, and the heterophile test remains negative. In the three cases mentioned, the patients were children under seven. Mild coryza, slight cough, and sore throat were present. The cold agglutinin test was negative.

Reiter's Disease.—While atypical cases may not be possible to diagnose accurately, this disease is a real clinical entity and, in its typical form, would be hard to mistake for anything else, once one is familiar with it. The characteristic diagnostic triad is conjunctivitis, urethritis, and arthritis. Smears and cultures are free of organisms, but despite this, in some cases the disease has been erroneously diagnosed as gonorrhea on the sole basis of (sterile) urethral discharges. In a few instances, superficial ulcerative lesions develop on the buccal mucosa of the bladder or urethra, the glans penis, and the plantar surfaces of the feet. It has been mistaken for Stevens-Johnson disease, a type of erythema multiforme with conjunctivitis and buccal mucous membrane involvement. Dunham and associates[8] succeeded in isolating a filtrable virus from the conjunctival and urethral secretions of a patient with Reiter's disease. It grew in developing chick embryos, from which it was successfully inoculated into mice, 60 per cent of which developed conjunctivitis.

Mapharsen is the drug of choice in treatment.

Poliomyelitis.—Death during the acute stage of poliomyelitis is almost entirely the result of the patient's inability, because of the structures involved in the disease, to meet the basic, physiological, respiratory requirements of the human body. Generally speaking the only patients who die are those whose respiratory apparatus is involved. Therefore, early correction of respiratory deficiencies becomes imperative. Fundamentally, the problem resolves itself into two practical components: (1) maintain an open airway to allow adequate pulmonary ventilation; (2) where the patient's gaseous interchange is cut down through mucus secretions, pulmonary edema or atelectasis, to prevent or remove secretions and supply sufficient oxygen and air, or oxygen and helium. Respiration by means of the iron lung is indicated only when ventilation is deficient, which is to say, when the respiratory center is involved, or when there is a disabling paralysis of the intercostal muscles or diaphragm. In the former case, if aberrant and irregular impulses from the respiratory center cause the patient to breathe against the respirator, so that breathing is not synchronized with the machine, one or two doses of intocostrin (curare) almost invariably produces the desired effect. If obstruction to a free airway exists, tracheotomy should be performed at once. (We prefer the low type of tracheotomy.) Suction should be used during expiration. Kubicek and associates[18] point out that an arterial oxygen tension less than 100 mm. of mercury may injure vital centers. They state that the usual determination of the percentage of oxygen saturation of the hemoglobin, such as is advocated by Comroe,[4] is a useful adjunct in determining oxygen deficiency but may lead to erroneous conclusions regarding the actual amount of oxygen received by the ultimate cell. He points out, for example, that if the oxygen saturation of hemoglobin falls to 90 per cent from the norm of 96 per cent, the partial pressure of dissolved oxygen in the plasma falls from 100 to 60 mm. of mercury, a reduction of 40 per cent in the force which moves oxygen from the plasma to the cell. He further points out that the pathologic changes of the disease, itself, interposes physical barriers to the free interchange of gases, such as perivascular cuffing, edema of the tissues, and hemorrhage. By obtaining a free airway to increase the oxygen tension within the arteries, and by the use of medicinal oxygen, one may increase the transfer of plasma oxygen to the vital nerve cell and prevent destruction.

Waiting for cyanosis to indicate lack of available oxygen may be disastrous: By the time cyanosis is visible the flow of oxygen from capillary blood plasma to nerve cells has been decreased at least 65 per cent. This explains why cyanotic patients so frequently die—anoxemia of high degree was present long before any sign of cyanosis. The symptoms of anoxia are confusing. They are headache, tachycardia, hyperpyrexia (not usual in ordinary poliomyelitis), stupor, convulsions, or delirium. In therapy, equal parts of oxygen and helium are preferred to oxygen and air or to straight oxygen.

Comroe and Bothelo made arterial punctures and determined the oxygen saturation of the blood by the method of Van Slyke and Neill, and used their results to set the oximeter accurately at a known value.[4] Under such conditions the oximeter becomes

a reliable instrument and may be of greatest assistance in indicating the proper time to perform a tracheotomy.

Baker [2] believes that increase in pressure in the bronchial tree is of value in patients tending to develop pulmonary edema, and that fluids should be restricted to meet the requirements of the case.

If one is to judge from the clinical and laboratory findings as to the surviving patients, the strain of infecting virus in Southern California would appear to have changed with the epidemic of 1942, since the morbidity rate has been lower, the mortality rate higher, and the manifestations of the disease much more like those seen in the eastern United States than was previously the case. Over 400 cases occurred in Los Angeles County in 1947 and over 1,600 the year before. In previous years the situation in 1947 would have been deemed an epidemic.

Patients with no involvement of the respiratory apparatus are treated with hot blanket packs: The prone pack, the additional pack, or the full Kenny pack, according to the need of the individual. All these procedures have their usefulness in affording mental and physical relief to the patient. Physical therapeutic procedures aimed at the economic rehabilitation of the patient are started as soon as he is able to stand the necessary physical exertion.

Q Fever.—The disease is caused by Rickettsia Burneti, first described by Burnet and Freeman,[3] and it gets the name from the question marks they made in their note books while studying it, not from Queensland as is so often said. An organism isolated in this country by Cox [5] in 1940 has been found to be identical with R. Burneti. Unlike most rickettsia bodies, it is both intracellular and extracellular in tissues and exudates. It may be grown in developing chick embryos. Blood tests would indicate that many cattle workers in the western states have had the disease at some time in the past, and that it is an old disease, new only, in its recognition. Los Angeles County has had several hundred cases since 1946, although the diagnosis in some cases listed in 1946 was made only in retrospect and in the light of experience with new cases in 1947. The preliminary report emanating from the Public Health Service [16] shows that in Southern California most cases have been in dairy workers or those who lived around dairies. The organism was recovered from the milk of many widely separated dairies. No diminution in the quality or quantity of milk was noted; no demonstrable illness was found in any of the cattle of these dairies; local infection of the teats or udders without general symptoms is suspected in cows; no insect vector has been found.

Except in unusual circumstances, it is rarely possible to make a diagnosis of Q fever either early or during the clinical course of the disease. In retrospect, overlooked infections and incorrect diagnoses have been common. Patients acutely affected may have high fever, gross rales in the chest, blood-streaked sputum, mental confusion, meningism, pleural effusion, and moderate elevation of the blood sedimentation rate. Complement fixation or agglutination tests are rarely positive before the end of the second week or later. In a late stage of the disease, the blood may present the typical Downey-cell lymphocyte seen in infectious mononucleosis, but the heterophile remains negative.

After vague malaise, the onset is generally abrupt and the symptoms may be either of two types: (1) retro-orbital pain on ocular movements, accompanied by chills, chilly sensation, headache, and continuous or intermittent fever ranging from 100.5° to 106° F. Respirations usually remain under 30, the pulse is disproportionately slow for the fever, and cough sets in. (2) Onset is with conjunctivitis and rhinitis, after which it follows much the same course as the other. Differential diagnosis for the most part is entirely a laboratory procedure, and the diseases requiring consideration are, among others, primary atypical pneumonia, infectious mononucleosis, bronchopneumonia, rarely lobar pneumonia, influenza, psittacosis, dengue, brucellosis, typhoid, typhus, systemic tularemia, and pulmonary tuberculosis. In about 20 per cent of the cases a punctate rash appears near the end of the second week. It is ephemeral and not diagnostic, but has been known to last 72 hours, appearing first on the back, then the chest and abdomen. In over half the cases the chest involvement would be entirely missed unless chest roentgenograms were taken, and in this respect it closely resembles primary atypical pneumonia, the disease for which it is most often mistaken.

Rabies.—Recently for the first time a suspicion of rabies in a human was confirmed by injecting the patient's saliva into white mice.[7] Later, Negri bodies were seen in the brains of the animals when they were sacrificed after having contracted the disease.

Leprosy.—In view of many reported failures to induce leprosy by experimental inoculation through the years, the recently reported development of leprosy in designs tattooed on the arms of two Marines is noteworthy.[19] Both were tattooed at the same place in Melbourne, Australia, in June, 1943. Early in 1946 lesions developed in these tattooed areas, but not in those made at other times and places, and Hansen's bacilli were found present at the National Leprosarium in Carville, Louisiana. Cases of apparent accidental inoculation producing leprosy have appeared from time to time in the literature, however, and we have a case to add to this list. A Los Angeles high school boy worked in a stone quarry where many Mexicans were employed. These laborers habitually defecated on the floor of the quarry. (None of them, however, is known to have had leprosy.) One day a premature blast blew many fine particles of stone from the quarry into the skin of this lad's face. Two years later, granulomatous lesions developed around a number of these stony inclusions, and from them leprosy bacilli in typical arrangement were recovered.

Until recently, the treatment of leprosy consisted of providing good hygiene, plenty of rest, and a balanced diet; in short, the same treatment as that of uncomplicated pulmonary tuberculosis. Drugs were tried and found wanting. However, with the

advent of the newer sulfone drugs, new hope of arresting the disease is held out to lepers. Promin, diasone, and promizole have all produced sustained objective improvement in the lesions of leprosy.[12] Improvement has been slowly attained, but steady in progress. So far, promin seems to be the drug of choice.

Meningitis.—In the clinical teaching centers of the world, the approach to the diagnosis and treatment of the bacterial meningitides by different clinicians has been pretty much the same in principle, varying only in application according to individual thinking and experience, as to the number and site of spinal punctures done, the combination of chemotherapeutic agents with antibiotic drugs, etc. We believe that few experienced clinicians will be able to agree with the recommendations of Hoyne and Brown [15] in their analysis of 727 cases of meningococcal meningitis. They recommend that spinal puncture be done for diagnosis only, and in some instances even omitted for that; that penicillin be omitted in treatment as an unnecessary adjunct; that in treatment sulfathiazole is the drug of choice; and that the emphasis placed upon obtaining sulfonamide blood levels is unnecessary. Consensus in a voluminous world-wide medical literature is not in accord with these recommendations and findings: There is altogether too much evidence to the contrary. Sulfadiazine, or equal parts of sulfadiazine and sulfamerazine (which we have used in several hundred cases of meningitis of varying origin) have been shown to produce far fewer and less serious side-effects than sulfathiazole, and to be at least as effective therapeutically. In the various types of severe meningitis, the practice of doing lumbar punctures at four-day intervals, for eight to sixteen days after the cessation of active treatment, has often enabled us to forestall severe relapses. When the leukocytes in spinal fluid have been steadily diminishing, and follow-up punctures show a sudden or marked rise in the white cells in the spinal fluid, almost invariably a relapse is present; any other signs or symptoms may remain inevident for one or two days. We accept this, unless some reason is otherwise apparent to account for it, as an indication for the prompt resumption of therapy. It has been a particularly valuable procedure in the care of influenza-B meningitis cases, but at one time or another has been helpful in all types. Among the smooth strains of Haemophilus influenzae, six have been isolated. However, in over 90 per cent of the cases of influenzal meningitis, strain B is the cause. In this type Alexander's serum, sulfonamides, and streptomycin are all of value and we give them concurrently. In types other than B, the serum is omitted. If resistance develops to streptomycin, some strains are quite susceptible to penicillin as second choice.

Tuberculous Meningitis.—In cases of miliary tuberculosis with concurrent meningitis, or of uncomplicated tuberculous meningitis, streptomycin at times affords almost miraculous arrest, at other times total failure. The dosage has not been uniformly established, and reports almost too numerous to mention are appearing in current literature. We are finding that the proper dose has to be individualized to meet the needs in a given case, with procedures changed to meet requirements. When a relapse follows discontinuance of streptomycin treatment, resumption of therapy has often failed, due to the streptomycin-fastness acquired by the surviving organisms. That this is not always true is proven in the case of a patient at present undergoing treatment on our service. The patient, a three year old child, underwent 12 weeks of streptomycin treatment for miliary tuberculosis. The disease was arrested and the treatment stopped in May, 1947. Three months ago the patient was readmitted to the hospital with proven tuberculous meningitis, and streptomycin was given intrathecally and intramuscularly. Response was immediate, and at present, although treatment continues, the child appears perfectly well.

While dosage is varied to fit the requirements of age, sex, therapeutic response, tolerance to the drug, etc., the basic plan of streptomycin therapy for tuberculous meningitis, with or without miliary involvement, is to give 0.125 to 0.250 gm. intramuscularly every six hours, and 0.05 to 0.1 gm. intrathecally daily for six weeks. After that, treatment may be altered to fit requirements, but in any event usually continues at least three months.[6] If the same area of the spine is repeatedly and consistently used in doing daily lumbar punctures, the drug ultimately produces a yellow pigment in the spinal fluid. This pigment remains unidentified. Alternating cisternal with lumbar puncture will usually prevent its appearance. After six weeks, taps are only done two or three times weekly. From the treatment outlined, so far we have seen very few toxic reactions, none of them irreversible. Results have been as good as those obtained when larger doses were employed. With larger doses toxic manifestations appear in direct proportion to their increased size and the length of time they are used, and any deafness caused is permanent.

Chemotherapy and the Antibiotics.—In many infections formerly incurable, the outlook has been entirely changed through the proper selection and application of chemical and antibiotic agents to the treatment of them. The duration of many other diseases, and the rate of mortality from them, have been substantially reduced. Where the agents have been found effective, formerly useful procedures either have been altered or abandoned in nearly every instance. Although a detailed discussion of these remarkable drugs is not possible in this short presentation, a few things should be mentioned in passing. There is increasing evidence of many types that the pH of the urine should be maintained at 7.4 or higher when large doses of sulfonamides are used in the treatment of systemic infections, and that sodium bicarbonate should be replaced by the lactate or the citrates for this purpose. From the standpoint of preventing untoward side-effects, the use of two or more sulfonamide drugs in proper proportion appears to be an improvement over using any one of them alone, and therapeutically at least as efficacious. For the past 18 months we have been using equal

parts of sulfamerazine and sulfadiazine. This combination has been very effective therapeutically, and has produced far fewer disagreeable or dangerous side-effects than we have previously experienced in the use of sulfonamide preparations.

Eagle [9] has shown that a paradoxical reaction may appear in a certain number of strains of streptococci and staphylococci when the amount of penicillin in the blood is raised above the optimum level for their destruction. In other words, if penicillin is given in some of these infections beyond an optimum dosage, the procedure not only wastes the drug but causes failure to destroy the organisms. When possible, dosage should be calculated upon sensitivity ascertained in vitro.

Some chemicals have the property of preventing excretion of penicillin through the renal tubules,[20] thus producing very high blood levels though actually less penicillin has been given. This may be of value when inordinately high blood levels must be maintained, but none of the chemicals so far tested is fool-proof. Of those tested so far, caronamide seems to be the best, but it must be very carefully watched, for it invariably produces a reducing substance in the urine, believed to be a metabolite of the drug itself, as well as albumin, casts and red blood cells. These usually clear up in a few days after the drug is stopped.

Hyaluronidase, an enzyme, has become widely used as a rapid spreader through the tissues of fluids and sulfonamides. It overcomes the blocking effect of hyaluronic acid and allows rapid diffusion by increasing the permeability of the body's mucoid and connective tissues.

Para-aminobenzoic acid (usually abbreviated to P.A.B.A.) has become the drug of choice in treating the rickettsial diseases. The exception is Q fever, in which streptomycin is indicated. The dose of P.A.B.A. is 2 gm. every two hours. The patient should be alkalinized and the blood watched for any developing neutropenia.

The predicted threat of major introductions of tropical diseases into this country by returned service men has not materialized. However, in closing, it might be well to invite attention to the fact that in the past year cases of schistosomiasis, leishmaniasis, balantidium coli dysentery, fasceolopsis buski infestation, and Madura foot, among others, have been seen in this country.

60 South Grand Avenue.

REFERENCES

1. Allen, F. H., and Kellner, A.: Infectious mononucleosis: An autopsy report, Am. J. Path., 23:463, 1947.

2. Baker, A. B.: Bulbar poliomyelitis: Diagnosis and treatment, Ill. Med. Jour., 92:160, 1947.

3. Burnet, F. M., and Freeman, M.: Experimental studies on the virus of "Q" fever, Med. J. Australia, 2:299, 1937.

4. Comroe, J. H., Jr., and Bothelo, S.: The unreliability of cyanosis in the recognition of arterial anoxemia, A. J. Med. Sci., 214:1, 1947.

5. Cox, H. R.: Rickettsia diaporica and American "Q" fever, A. J. Trop. Med., 20:463, 1940.

6. Current Comment: Dosage of streptomycin in tuberculosis, J.A.M.A., 135:842, 1947.

7. Duffy, C. E., Wolley, P. V., Jr., and Nolting, W. S.: Rabies (a case report with notes on the isolation of the virus from saliva), J. Pediat., 31:440, 1947.

8. Dunham, J., Rock, J., and Belt, E.: Isolation of filterable agent pathogenic for mice from a case of Reiter's disease, J. of Urol., 58:212, 1947.

9. Eagle, Harry: A paradoxical zone phenomenon in the bacterial action of penicillin in vitro, Science, 107:44, 1948.

10. Eisele, C. W., and McCullough, N. B.: Combined streptomycin and sulfadiazine treatment in Brucellosis, J.A.M.A., 135:1053, 1947.

11. Eisele, C. W., McCullough, N. B., and Beal, G. A.: Brucella agglutination tests and vaccination against cholera, J.A.M.A., 135:983, 1947.

12. Faget, G. H., and Erickson, Paul T.: Chemotherapy of leprosy, J.A.M.A., 136:451, 1948.

13. Gordon, I., Ingraham, H. S., and Korns, R. F.: Transmission of epidemic gastroenteritis to human volunteers by oral administration of fecal infiltrates, J. Exp. Med., 86:409, 1947.

14. Hall, W. H., and Spink, W. W.: In vitro sensitivity of Brucella to streptomycin, etc., Proc. Soc. Exper. Biol. & Med., 64:403, 1947.

15. Hoyne, A. L., and Brown, R. W.: 727 meningococcic cases: An analysis, An. Int. Med., 38:248, 1948.

16. Huebner, R. J., Jellison, W. L., Beck, M. D., Parker, R. R., and Shephard, C. C.: Q fever studies in Southern California, Pub. Health Reports, 63:214, 1948.

17. Knisely, M. H., Bloch, Eliot, T. S., and Warner, Louise: Sludged blood, Science, 106:431, 1947.

18. Kubicek, W. G., Holt, G. W., and Kottkey, F. J.: Physiology of respiration as applied to the treatment of bulbar poliomyelitis, 29:84, 1948.

19. Porritt, R. J., and Olsen, R. E.: Two simultaneous cases of leprosy developing in tattoos, Am. J. Path., 23:805, 1947.

20. Shaw, C. C., Boger, W. P., et al.: Enhancement of penicillin in blood levels in man by means of a new compound, Caronamide, A. J. Med., 3:206, 1947.

21. Spink, W. W., Hall, W. H., Shaffer, J. M., and Braude, A. I.: Human Brucellosis, its treatment with a combination of streptomycin and sulfadiazine, J.A.M.A., 136:382, 1948.

QUESTIONS AND ANSWERS

DR. CLINE: Dr. Bower, would you advise hospitalization of a patient with brucellosis previously inadequately treated with sulfa drugs, and the institution of treatment with sulfadiazine-sulfamerazine combined with penicillin or streptomycin?

DR. BOWER: Each case must be considered individually on its merits and a general answer cannot be given. We recently treated a 10 year old boy in whom the disease was proven, with sulfadiazine-sulfamerazine for three weeks, during the first eight days of which he received 0.5 gm. of streptomycin every six hours. For five years he had had fever daily, ranging from 99.6 to 102 F., and last year was inadequately treated with sulfadiazine alone. He has now remained completely well for over three months following the therapy. Penicillin is of no value in the treatment of brucellosis.

One should be sure of the diagnosis before resorting to such a strenuous regimen, and brucellosis may be one of the hardest of all diagnoses to make in the field of infectious medicine. The drug therapy outlined, powerful drugs are used, requiring that careful safeguards be set up for the patient. They are not fool-proof and are capable of causing great harm to the patient if not carefully watched. Also the treatment may have to be changed to meet changing requirements.

Recent Developments in Treatment of Pulmonary Diseases

WILLIAM M. M. KIRBY, M.D., *San Francisco*

ONE of the most important advances in chest diseases in recent years has been the advent of streptomycin in the treatment of pulmonary tuberculosis. Although its discovery was announced only four years ago, experience with over one thousand patients in Army, Navy, Veterans, and civilian hospitals has clearly demonstrated that streptomycin alters the course of tuberculous infections in a manner unapproached by earlier chemotherapeutic agents.[3,7]

Exudative infiltrations of recent origin represent the type of pulmonary lesion most favorably influenced by streptomycin. At this stage vascularity remains little impaired, and there is good penetration of the antibiotic throughout the involved tissues. The most dramatic results are observed in miliary tuberculosis, in which there is frequently complete roentgenologic clearing of the pulmonary infiltrations. Relapses unfortunately occur in the majority of such patients, and a second course of treatment is ineffective because of the appearance of resistant organisms. Another reason for the poor results obtained in miliary tuberculosis is the high incidence of tuberculous meningitis, which may be present when treatment is started, or may develop two or three months later. With tuberculous meningitis the initial response to treatment is also usually good, but later the signs and symptoms recur and death results within a few weeks. Only about 15 per cent of patients with tuberculous meningitis have remained symptom free for as long as a year following therapy with streptomycin.

Because of the development of resistant organisms, and the toxic potentialities of the drug, it is generally felt that streptomycin is not indicated at present in the treatment of patients with minimal and moderately advanced pulmonary tuberculosis, since in these stages the response to bed rest and collapse therapy is usually favorable. Streptomycin is also contraindicated in chronic fibroid or fibrocaseous tuberculosis, in which anatomical barriers prevent adequate contact between the infecting organisms and the antimicrobial agent. There may be regression of the infiltration surrounding long-standing fibrocaseous involvement, but improvement is usually slight and temporary. Tuberculous empyema is not benefited by streptomycin.

Streptomycin also seems to be of value when used in conjunction with the surgical treatment of tuberculosis, especially resection. In the recent series of Clagett,[2] streptomycin appeared to prevent early postoperative spreads following lobectomy and pneumonectomy. Late spreads, however, were not prevented. The role of resection in the treatment of pulmonary tuberculosis is not finally established, but preliminary experience indicates that streptomycin will prevent at least some of its hazardous complications. Streptomycin may also be used in conjunction with thoracoplasty, to prepare the patient for operation, and for the treatment of postoperative spreads. Other surgical procedures, such as extrapleural pneumonolysis, are being re-evaluated in the hope that streptomycin will decrease complications.

A disturbance of function of the inner ear is the chief toxic manifestation caused by streptomycin. This occurs in virtually every patient who receives daily doses of 2 gm. or more for three or four weeks, and causes unsteadiness and dizziness, which is usually mild, but may be incapacitating. The damage to the vestibular apparatus is apparently permanent, but except in elderly individuals compensatory mechanisms are so effective that the disability is not noticed after a few weeks. Sensitivity reactions, chiefly fever, rashes, and eosinophilia, are common but usually of no consequence. Other serious toxic manifestations such as deafness, renal damage, exfoliative dermatitis, and agranulocytosis, are fortunately rare. Aside from toxicity, the main limitation to streptomycin therapy is the development of resistant organisms. The majority of patients treated with daily doses of 2 gm. or more of the antibiotic have developed highly resistant organisms within three or four months, and sometimes as early as the sixth or eighth week. Clinical experience has demonstrated that when resistant tubercule bacilli appear in the test tube, the patient no longer responds to the action of the drug.

Following empirical trials with 2 or 3 gm., it has been found that equally good results are obtained in pulmonary tuberculosis with 1 gm. daily, or less, given in two or three divided doses. Recent evidence indicates that these smaller doses are associated with decreased toxicity and with a lower incidence of development of resistant organisms.

OTHER PULMONARY INFECTIONS

Streptomycin is also remarkably effective in the treatment of a variety of non-tuberculous pulmonary infections. Pleuropulmonary tularemia is perhaps the most noteworthy example. Morgan[8] reports gratifying results in 27 patients, and emphasizes the value of early diagnosis and treatment. Since the diagnosis is often made by a rising agglutinin titer during the second or third week of illness, early treatment on the basis of the clinical picture is advised in regions where tularemia is endemic.

Friedlander's pneumonia also responds well to streptomycin therapy. Here again treatment must be started early, because of the tendency of this infection to cause extensive tissue destruction and abscess formation. Hemophilus influenza pulmonary

Read as a part of the Panel Discussion of What's New before the general meeting at the 77th Annual Session of the California Medical Association in San Francisco, April 11-14, 1948.

From the Department of Medicine, Stanford University School of Medicine.

infections should be treated with both streptomycin and sulfadiazine; striking results have been obtained in the relatively small number of cases so far reported. Pasteurella pestis is highly susceptible to streptomycin, and the recently published animal experiments of Meyer and his associates at the University of California suggest that its use will markedly decrease the mortality from pneumonic plague.[10] Brainerd[1] of San Francisco has found in a small number of cases that streptomycin appears to be at least as effective as hyperimmune serum in the treatment of severe whooping cough.

The response obtained in these infections, caused by Gram negative organisms, makes a prompt and precise bacteriological diagnosis more imperative than ever before. Identification takes two or three days, so that when there is any doubt, as for example when direct smears of the sputum show a predominance of Gram negative organisms, sulfadiazine or streptomycin should be administered from the outset. If the drug is given in doses of 1 to 2 gm. daily for only a few days, the toxicity of streptomycin is negligible, and it can be promptly discontinued if the infection is found to be caused by organisms more susceptible to penicillin.

The role of penicillin in the treatment of pulmonary infections is now so well established that it need be mentioned only briefly. The treatment of pneumococcic and other bacterial pneumonias, with or without empyema, has been revolutionized by the advent of this virtually nontoxic agent. Curiously, one virus infection of the respiratory tract, psittacosis, is suspectible to penicillin. Brainerd[1] has treated eight patients with psittacosis, mostly acquired as laboratory infections, and reports prompt subjective and objective improvement, with complete clearing of the pulmonary infiltrations within a few weeks. The majority of lung abscesses can now be cured by medical means alone, and in the chronic cases requiring surgical drainage or resection, the administration of penicillin greatly reduces postoperative complications. In bronchiectasis penicillin is of invaluable aid in treating intercurrent pneumonias, in enabling otherwise incapacitated individuals to gain weight and return to work, and in the pre- and postoperative management of cases suitable for lobectomy or pneumonectomy. The safety with which all surgical operations in the chest can be undertaken has been greatly enhanced by the newer antimicrobial agents, and especially penicillin.

LUNG TUMORS

Increased interest is being shown in the diagnosis and treatment of lung tumors, especially carcinoma of the lung. Formerly considered a rare malignancy with a hopeless prognosis, this tumor is now known to make up about 10 per cent of all carcinomas. Efforts toward early diagnosis and treatment have yielded encouraging results.

Approximately 80 per cent of carcinomas of the lung occur in men over 40 years of age. In this age group cough, chest pain, hemoptysis, persistent respiratory infections, or abnormal densities on the chest x-ray, should be regarded as manifestations of carcinoma of the lung until proved otherwise. The diagnosis can be established in less than half the cases by bronchoscopy and biopsy. Examination of sputum or bronchial secretions for tumor cells, stained by the Papanicolaou method, represents an important new aid in this respect, for its use permits a definite cytologic diagnosis in over 80 per cent of cases.[5,6] An added advantage of the smear examination is that slides can be prepared by local physicians in outlying communities and sent to centers where there are specialists in cellular morphology. Such a center has been established at the University of California.

The treatment of carcinoma of the lung is resection, usually pneumonectomy. Recent advances in anesthesiology and surgical technic, as well as the advent of the antibiotics, have greatly decreased the operative hazards. In Ochsner's recently published series the surgical mortality for carcinoma of the lung was 46.4 per cent prior to 1942, and only 19.3 per cent since then.[9] Of the patients who underwent resection over five years ago, 23.3 per cent are still alive. Thus, although many patients with carcinoma of the lung are seen after the tumor has reached an inoperable stage, the outlook is much more hopeful in cases in which the diagnosis is made early.

Exploratory thoracotomy, which in skilled hands is now felt to be no more dangerous than exploratory laparotomy, is being resorted to with increasing frequency in the management of mediastinal and parenchymal shadows of unknown cause. Davis, for example, recently did exploratory thoracotomies in 40 patients to find the cause of silent spherical shadows, and found that in 70 per cent of the cases they were caused by malignant tumors.[4] Mediastinal enlargements, when bilateral, may be observed during an initial period of radiation therapy if the clinical picture is suggestive of a lymphoma. If the enlargement is unilateral, thoracotomy is usually indicated without delay if an infectious process can be ruled out and the results of other diagnostic procedures are negative. Angiocardiography is most helpful in ruling out aneurysms and other vascular abnormalities. Keen clinical judgment is needed, but most authorities are now agreed that an aggressive policy toward exploratory thoracotomy is one of the chief methods of decreasing the mortality rate from pulmonary neoplasms.

SUMMARY

Streptomycin and other antimicrobial agents have revolutionized the treatment of pulmonary infections, including tuberculosis, and have greatly decreased the hazards of surgical operations on the chest. Notable advances have also been made in the diagnosis and treatment of lung tumors.

REFERENCES

1. Brainerd, H.: Personal communication.

2. Clagett, O. T., and Seybold, W. D.: Resection in pulmonary tuberculosis, Proc. Staff Meet., Mayo Clin., 23:81, 1948.

3. Council on pharmacy and chemistry, the effects of streptomycin on tuberculosis in man, J.A.M.A., 135:634 (Nov. 8), 1947.

4. Davis, E., cited by Meade, R. H., Jr.: Am. Rev. Tuberc., 57:19, 1948.

5. Farber, S. M., Benioff, M. A., and Tobias, G.: Primary carcinoma of the lung, diagnosis by cytological studies of sputum and bronchial secretions, in press.

6. Herbut, P. A., and Clerf, L. H.: Bronchogenic carcinoma: Diagnosis by cytologic study of bronchoscopically removed secretions, J.A.M.A., 130:1006 (Apr. 13), 1946.

7. Hinshaw, H. C.: Annual report on streptomycin, J.A.M.A., 135:641 (Nov. 8), 1947.

8. Morgan, H. J.: Pleuropulmonary tularemia, Ann. Int. Med., 27:519, 1947.

9. Ochsner, A., De Bakey, M., and Dixon, J. L.: Primary cancer of the lung, J.A.M.A., 135:321 (Oct. 11), 1947.

10. Quan, S. F., Foster, L. E., Larsen, A., and Meyer, K. F.: Streptomycin in experimental plague, Proc. Soc. Exper. Biol. and Med., 66:528, 1947.

The Surgical Treatment of Cancer

RICHARD B. CATTELL, M.D., *Boston*

SURGICAL treatment offers the only hope of cure for most malignant tumors. It can be effectively combined with roentgen and radium therapy in organs such as the thyroid or uterus. Complete extirpation of the malignant process will result in cure. Unfortunately, good results follow operation only when the malignant lesion is confined to its primary site, while too often patients are submitted to operation at a stage in the disease when local extension, regional node involvement and distant metastases are already present. The percentage of so-called five-year cures is reduced to a low figure when extension has occurred, although palliative benefits in the form of increased comfort and possible prolongation of life may be obtained.

Progress continues to be made year by year in technical procedures for the removal of malignant tumors, and new fields of surgery have been developed in recent years which permit the removal of cancer in locations difficult of access. Improved methods, new operative procedures, better preparation of patients for operation, widespread use of blood, transfusions, improved anesthesia and the use of antibiotics all have aided in the reduction of mortality following the extensive operative procedures necessary for the removal of malignant growths. Further technical improvements will continue to be made year by year, yet they have not appreciably changed the curability rate of malignancies such as those occurring in the esophagus, stomach or lung.

In order to improve the results of surgery in cancer we must look to some other means than possible technical improvements in operations. Since the surgical results are dependent upon the stage to which the malignancy has developed, it is essential that the major effort be directed toward earlier diagnosis at a time when the malignancy is confined to its primary site. This attack on the cancer problem has taken several directions, most of which have been helpful. Education of the public has now been conducted for many years, yet in recent surveys of large groups of patients with cancer, the delay of the patient in seeking medical advice after being aware of symptoms was shown to be still several months. A continuation of this program of lay education is necessary and essential for earlier diagnosis.

The delay in patients reaching operation is not entirely the fault of the patient and a real responsibility for it must be accepted by us as physicians. Due to inadequate or incomplete examination, a correct diagnosis in many cases is arrived at only weeks or months after the patient first consults his physician with definite symptoms suggesting the possibility of malignancy. An attempt is being made this year under the auspices of the American Cancer Society, American College of Surgeons and state medical societies to establish cancer detection centers for the examination of patients without symptoms to try to get earlier diagnoses. Experiences so far with cancer detection centers have not been encouraging. Few patients with cancer will be discovered by this means, a large expense is involved and it seems wiser that these examinations be done by the individual physician in the course of a general examination for the discovery of any disease as well as cancer. "Pilot" cancer detection centers in order to determine just what is necessary for an examination for the detection of a malignancy can be useful, since by this

Read as a part of the Panel Discussion of What's New before the general meeting at the 77th Annual Session of the California Medical Association in San Francisco, April 11-14, 1948.

From the Department of Surgery, The Lahey Clinic, Boston, Massachusetts.

means clinical data can be accumulated and made available for all physicians. A cancer clinic in a general hospital for the examination of patients with symptoms which may indicate the presence of cancer is an entirely different matter. Such clinics have been very effective in establishing the early diagnosis of cancer.

The most important approach to this problem is one in which the premalignant stages of the disease are sought. A number of serious malignancies have a recognizable premalignant stage, such as leukoplakia of the mouth, ulcers of the lip, nodules of the breast and polyps of the rectum. The surgeon should have a much greater sense of achievement in removal of an early premalignant lesion than in the radical extirpation of a large malignant growth.

In a consideration of what is new in the surgical treatment of cancer, new procedures have been advanced some of which have had sufficient trial to permit judging the results. Some that have been proposed and tried within the past year must await a longer period of evaluation.

CARCINOMA OF THE THYROID

Most malignancy of the thyroid arises in a preexisting fetal adenoma. Of these, 3 to 10 per cent are malignant at the time they are removed. At the time of removal of the discrete tumors, if there are any signs of extension or adherence, immediate frozen section should be done and, if malignancy is found, a total lobectomy or total thyroidectomy done. If this procedure is combined with postoperative radiation therapy, approximately 80 per cent will remain free of the disease. When carcinoma of the thyroid involves most of the gland, total thyroidectomy followed by postoperative roentgen therapy results in "cure" in 17 to 60 per cent, depending upon the type of malignancy present. When papillary tumors are present, total lobectomy with radical neck dissection, again combined with roentgen therapy, gives very satisfactory results. This is one field where surgical treatment of premalignant lesions and of early malignancy has been most encouraging.

CARCINOMA OF THE ESOPHAGUS

In recent years resection of the esophagus with restoration of continuity by anastomosis of the upper esophagus to a tube of stomach or jejunum has been proved technically feasible, with 30 to 60 per cent of carcinomas of the esophagus being resectable. Within the last year Sweet has described an operative procedure for resection of the upper third of the esophagus with anastomosis of a stomach tube in front of the arch of the aorta to the upper esophagus, which is an important advance. Resections of the middle third and lower third of the esophagus have now been performed in a large group of patients. It is impossible at present to judge the effectiveness of this procedure so far as the five-year results go, but the surgical mortality has been decreased year by year until this operation can be done with a mortality of 10 to 15 per cent. The immediate results of operation have been quite satisfactory, with the relief of symptoms.

CARCINOMA OF THE STOMACH

Few improvements have been made in the treatment of cancer of the stomach and the results following gastrectomy continue to be discouraging. Thirty to 45 per cent of these lesions are resectable, yet of those resected, only approximately 12 per cent have resulted in five-year survival. Improvement in the results following operation for cancer of the stomach will be accomplished only if early roentgenographic visualization of the stomach is done in any patient with persisting digestive symptoms. It is quite possible that certain technical improvements can be made from a surgical point of view. Ogilvie proposed the removal of all of the omentum with the stomach in an attempt to remove early serosal metastases, and this has now been accepted as a routine procedure. An increasing number of total gastrectomies have been performed for advanced malignancy of the stomach and it is quite possible that if the number of total gastrectomies be increased with removal of the spleen and careful removal of the gastrohepatic omentum and celiac nodes, the surgical results can be further improved.

CARCINOMA OF THE PANCREAS

In another group of malignancies, those in the region of the pancreas and duodenum, recently there has been successful removal. Through the influence of Whipple, an increasing number of patients with lesions in this location have survived radical pancreatoduodenectomy. Carcinomas of the ampulla of Vater fortunately are slow growing and tend to remain local and produce early symptoms of obstructive jaundice. Radical removal can be accomplished in these cases not only with reasonable expectation of cure but with normal restoration of liver, pancreatic and digestive functions. In this field, as in that of carcinoma of the esophagus, further time is necessary to evaluate the results. The authors can report 54 patients who have been submitted to pancreatoduodenal resection, with ten deaths and with two five-year survivals. A number of other patients are living one, two, three and four years.

CARCINOMA OF THE COLON

The surgical treatment of carcinoma of the colon continues to give the best results achieved in any type of intra-abdominal malignancy. A high percentage of patients, from 70 to 90 per cent, can be submitted to resection, with a five-year curability of over 50 per cent. With improvement in the preparation of the patient and with the use of antibiotics, primary resection with anastomosis can be accomplished in these cases with relative safety and a surgical mortality of approximately 5 per cent.

CARCINOMA OF THE RECTUM

Although carcinoma of the rectum is readily discoverable by digital or sigmoidoscopic examinations, patients with this disease continue to come to opera-

tion with the growth at a late stage. In our experience, only 40 per cent of such tumors are still confined to the primary site without spread at the time of operation, yet 90 per cent can be submitted to resection. More and more patients of an advanced age group are being encountered with this lesion. With all of the adjuvants to surgery and for the preparation of the patient for operation, recent advances have permitted the successful surgical extirpation of these lesions at an advanced age. In recent years, anterior resection of low rectosigmoid lesions and high rectal lesions with primary anastomosis has been successfully accomplished, but the effectiveness of this more local operation with restoration of intestinal continuity cannot yet be considered established. Likewise, a second operation with restoration of continuity, the "pull through" operation, has had an extended trial, but adequate five-year follow-up studies of cases following this procedure are not available. The abdominoperineal resection in one stage with abdominal colostomy still remains the generally accepted procedure for this lesion and is the procedure adopted in 98 per cent of the rectal carcinomas submitted to resection in our clinic.

During the past year Brunschwig has proposed radical removal of the pelvic organs, including the ureters, bladder, uterus, vagina and rectum, for extensive malignancy of the cervix and uterus where other surgical or radiation therapy has failed to arrest malignancy in this area. This involves bilateral transplantation of the ureters and sigmoidal colostomy. An evaluation of this procedure is impossible at present and while it has been demonstrated to be technically feasible with the use of rather heroic measures such as massive blood transfusions, a follow-up of these cases will be necessary to determine whether such an extensive procedure is worth while.

Other extensive procedures for carcinoma with local and extensive spread have been carried out in large numbers for palliation. While the operative mortality may be appreciably higher, many of these patients have greatly increased comfort; and if survival with comfort for a year or more can be accomplished, it must be, indeed, worth while.

Procedures for the relief of pain in inoperable malignancy, such as subarachnoid alcohol injection, rhizotomy and cordotomy, continue to be helpful. A recent development in this field has been the employment of prefrontal lobotomy by Poppen in 30 cases, with an encouraging relief of symptoms in most cases. Employment of this procedure, which has been used extensively for serious mental disease, must still be considered as a possible aid in this situation, but further observations for a longer period of time are necessary to evaluate the results.

In the surgical treatment of cancer we must make certain that new procedures that are advanced for the cure of cancer are consistent with the established facts relative to the growth and spread of the malignant processes in the various sites. When blood vessel invasion is present in the tumor or its environs, the possibility of cure is greatly reduced. We must remember that a block dissection, including the regional lymph nodes, must be done; if the curability of cancer by surgical means is to be improved, a wide area of removal is necessary. Any procedure which becomes less radical and is not based on this knowledge will decrease the satisfactory results.

SUMMARY

In the light of our present knowledge, surgical treatment still is the only effective means for cure in many cases of malignant tumors. Operative procedures have been improved and standardized, and can without doubt be further improved, yet they will offer little chance for cure if the growth has spread or metastasized. The improvement in surgical results must be dependent upon earlier diagnosis and the treatment of the premalignant lesion, as well as improvement in surgical techniques.

Lahey Clinic, 605 Commonwealth Avenue.

What's New in Gastroenterology

GARNETT CHENEY, M.D., *San Francisco*

STOMATITIS

A DISTINCT advance in the diagnosis and treatment of stomatitis is the replacement of the old classification of diseases of the mouth based on the appearance of the lesions, by a classification based on etiology. This has been a tardy change. The terms catarrhal, apthous, vesicular, bullous, ulcerative, membranous, and gangrenous, often represent stages in the evolution of lesions of common origin; and while the terms may be picturesque, they should be abandoned. Although the exact cause of certain forms of stomatitis remains obscure (making their management difficult), most of them can now be attributed to toxic agents, specific bacterial infection, virus infection, fungus infection, systemic disease such as leukemia or granulocytopenia, allergy, or to deficient nutrition stemming from a lack of vitamin C, thiamine chloride, riboflavin, folic acid, a liver factor, or a combination of these vitamins.

Appropriate therapy must be dependent on a knowledge of the causative agent. This is borne out by the successful management of syphilitic mucous patches and severe Vincent's stomatitis by penicillin, by the therapy of the oral lesions of sprue by folic acid, and by the lack of effectiveness of sulfa compounds and of penicillin in the treatment of herpetiform stomatitis and of Stevens-Johnson syndrome (stomatitis, conjunctivitis, respiratory tract symptoms, genitalia lesions and skin eruptions).

CANCER OF ESOPHAGUS

Early diagnosis of cancer of the esophagus is now of the greatest of importance, just as is early diagnosis of cancer of the pancreas, because operative removal of the growth with presumptive cure is now possible. Modern intrathoracic surgery has facilitated the resection of malignant lesions of the lower esophagus. If they are small and localized, complete extirpation is indicated. Three year cures have been reported. If the growth cannot be removed, freeing it from the surrounding tissues may temporarily alleviate obstructive symptoms.

PEPTIC ULCER

The tremendous interest in the peptic ulcer problem which has existed throughout the present century remains well sustained. In 1946, the Quarterly Cumulative Index Medicus lists 447 references to this subject. While most of the clinical interest in the management of patients with peptic ulcer centers around the control of gastric acid secretion, a refreshingly new approach to a solution of the enigma of gastroduodenal ulceration is noted in a few experiments dealing with mucosal resistance to erosion and peptic digestion. The barrage of publications by psychiatrists claiming that peptic ulcer is a psychosomatic disorder has not abated. In the author's experience, psychotherapy has neither cured the "peptic ulcer syndrome" nor, alone, shortened a symptomatic exacerbation.

Control of the acid pepsin secretion of the stomach by injections of enterogastrone has been reported. Enterogastrone is an extract of the intestinal mucosa which contains a humoral substance which depresses gastric secretion. Its development and clinical use have been reported upon by Ivy and his co-workers. Experimentally, it has proven highly successful in preventing peptic ulceration in "Mann-Williamson dogs," but has not prevented ulceration in animals subjected to repeated injections of histamine in oil and beeswax. Clinical reports are as yet meager, and the cases studied inadequately controlled. Relapses occur following a prolonged course of therapy. Enterogastrone is marketed by Armour Company in ampules for intramuscular use only. The dose is 200 mg. (5 cc.) daily for several months. It is expensive. There are a number of other methods of reducing gastric acidity by medicinal means which are simpler. Recently a combination of insoluble alkali and hog mucous extract has been marketed under the name of "Mucotin." It is claimed that this combination is better than alkali alone. As hog mucin has not stood the test of time as an anti-peptic ulcer agent, it is difficult to see how such a claim can be clinically substantiated.

VAGOTOMY

During the past two and one-half years a most dramatic and popular way of reducing gastric acid secretion has developed which also abolishes peptic ulcer pain. This is vagotomy. This operation has been strongly advocated in cases of peptic ulcer of psychic origin. As some physicians feel that most if not all cases belong in this category etiologically, it is easy to see why this operative procedure has been so widely utilized. Many authorities have agreed that it may be of specific value in the management of marginal ulcers—gastroduodenal ulcers. The operation has more and more frequently been combined with gastric resection which makes it impossible to properly evaluate the results of the nerve severing procedure. At present, vagotomy seems to be on the wane as a therapeutic procedure for peptic ulcer, although it undoubtedly has merit in a few highly selective cases. There are two reasons for this. First, it is not an altogether sound physiological procedure because an interruption of the psychogenic control of gastric secretion may not materially alter the local gastric phase of acid secretion. Second, the late end results of the operation are less and less encouraging.

DIETARY FACTORS IN PEPTIC ULCER

"Improving the resistance of the gastroduodenal mucosa" to peptic digestion is a meaningless phrase,

Read as a part of the Panel Discussion of What's New before the general meeting at the 77th Annual Session of the California Medical Association in San Francisco, April 11-14, 1948.

and yet it has appeared repeatedly throughout the past decades. Everyone agrees it should be done, but so far no one has been very specific on just how to accomplish the desired result. The therapeutic use of protein hydrolysates may indirectly achieve this purpose to a certain degree. As a negative nitrogen balance exists in some patients, an increased protein intake, particularly in the form of the hydrolysates, has allegedly produced more rapid healing of peptic ulceration and more rapid relief of pain than would otherwise be obtained. Only one controlled series of patients so treated has so far been reported. The results appear encouraging. Obviously, however, many ambulatory patients with peptic ulcer are on an adequate protein intake, and their resistance to peptic digestion could hardly by altered by this therapeutic procedure.

A dietary anti-ulcer factor which prevents gizzard erosions and cincophen gastric ulcers in chicks has recently been shown to give complete protection against histamine-induced peptic ulcers in guinea pigs. This factor is heat labile. It is present in raw milk, certain food fats, and in fresh greens. No adequate therapeutic trial of the factor in man has yet been reported, Enterogastrone may contain this factor.

GASTRIC CANCER

The diagnostic procedures necessary to the complete evaluation of a patient suspected of having gastric carcinoma cannot now be considered complete without carrying out special staining studies of the gastric sediment. Stained smears and paraffin sections of the sediment permit cytological examination which may lead to a positive diagnosis by definite recognition of tumor cells. Although such a positive diagnosis may not be possible in more than 10 or 20 per cent of cases, the procedure should be a routine one.

ULCERATIVE COLITIS

Unsuccessful forms of therapy for idiopathic ulcerative colitis are legion. Five new methods of treatment may ultimately fall into this same category, but must be considered at present because they may show merit in some instances. The first two methods are the use of penicillin and streptomycin. These antibiotics deserve a trial in patients showing signs of infection. Occasionally they seem to influence the course of the disease favorably. They are without beneficial effect in the majority of cases; usually those in which psychogenic factors, malnutrition, and allergy play an etiological role. The third, propyl-thiouracil, is reported to have caused improvement in a small group of patients by lowering the metabolism and thereby decreasing nervous tension. This therapy should be reserved for excessively emotional patients.

The fourth, ventriculin, a hog stomach extract, was reported as highly effective in about 90 per cent of a small group of patients. However, the author has found it without definite therapeutic effect in six consecutive cases. The fifth, intestinal mucosa extract, is said to promote remission in the milder forms of the disease. It is now available commercially as a powdered duodenal extract. The dose is a tablespoonful three times a day. It may contain a specific mucosa resistance factor.

SERUM HEPATITIS

The incidence of infectious hepatitis was high in military medical practice during World War II. It gradually became evident that some of the cases occurred following the injection of homologous blood products, both pooled plasma and whole blood. Cases are now being observed in civilian practice which follow blood bank transfusions and the injections of both fresh and frozen plasma. The incidence of homologous serum hepatitis in patients who have been given transfusions varies between 0.5 and 4.0 per cent, according to recent reports. A fatal outcome is not uncommon. The onset of jaundice is usually in the third month following transfusion, but may develop later.

The recognition of post transfusion hepatitis, with or without jaundice, should sound a note of alarm for those who promiscuously use blood and plasma at the operating room table and who commonly use it for its "tonic" effect. Fatal homologous serum hepatitis caused by a transfusion given to a dangerously ill patient is an acceptable risk, but the indication for transfusion should be clear and unmistakable, before a patient is subjected to such a risk, small as it may be at present.

PANCREATIC FERMENTS

The continued application of serum ferment determinations as a test for disturbed pancreatic function in acute pancreatic disorders indicates that this diagnostic procedure should be universally accepted. The serum diastase is increased early in acute pancreatitis, usually (but not invariably) during the first 12 to 24 hours, and may remain high for five or six days. The increase in diastase is measured in units of diastatic activity. The normal range is 60 to 180 units. Values above 200 units are distinctly abnormal; they may be over 3,000 units. An increase in serum lipase may occur earlier and persist longer in some cases of acute pancreatitis. These ferment determinations are rarely of any diagnostic value in the diagnosis of chronic pancreatitis or carcinoma of the pancreas.

490 Post Street.

QUESTIONS AND ANSWERS

DR. CLINE: Dr. Cheney, don't you believe that the term peptic ulcer should be given up because of the great difference in the treatment of gastric and duodenal ulcer and their prognosis? A. The answer is no. I believe the fundamental basic etiology of peptic ulcer is the initial acid erosion and peptic digestion which occurs in the majority of gastric ulcers as well as in duodenal ulcers. I do not think the term should be given up.

DR. CLINE: Dr. Cheney, please comment on the use of intraheptal for hepatic disease, dosage, precaution, limitations. A. That's another ten minute paper. I'm not at all certain in my own mind that the use of intraheptal given intravenously periodically as advocated by the manufacturers is any better than giving liver extract intramuscularly. I have been able to follow a few intraheptal treated cases for several months, and I have not been impressed that this method is superior to the other methods of giving liver extract over long periods of time. I trust that will answer the question.

What's New in Clinical Pathology

ALVIN G. FOORD, M.D., *Pasadena*

IN more than 25 years of practice limited to laboratory medicine, the author has observed year after year hundreds of new tests and techniques. Many have been tried and many discarded. Some have been with us for years and to these we cling, since time has proved their merit. No old or new laboratory procedures can supplant a good history taking and physical examination, or that ability to size up a patient which a skilled clinician attains only by experience and use of careful judgment. The knowledge and ability to choose one or more pertinent laboratory examinations rather than a gamut of tests, old or new, should be the proper goal. However, progress that may help clinch a suspected diagnosis has been made recently in all fields of clinical pathology, only a part of which can be discussed in this short presentation.

URINALYSIS

The more generalized use of a concentration method for bilirubin in the urine, such as the Harrison method emphasized by Foord and Baisinger,[3] and Hawkinson,[7] has allowed the detection of bile pigment in the urine of cases, even before examination of the patient has shown presence of clinical icterus. Watson's filter paper strip modification[12] (Harrison spot test) has further simplified this test and is semiquantitative. The more generalized use of the Ehrlich reaction in determination of urinary urobilinogen[13] as an estimation of the degree of hemolysis in hemolytic blood dyscrasias or the presence of parenchymatous liver damage, has certainly been of great help.

No recently proposed method of determining the presence of glucose in the urine has supplanted Benedict's method, which has been a laboratory standby since October, 1911. However, for simplicity of testing in the physician's office or the patient's home, especially for the diabetic patient examining his own urine, the "Clinitest" has been of great help, especially if longer tubes are used than the ones supplied by the manufacturer. The presence of acetone can be simply and accurately detected by the use of a prepared powder, "Acetone Test," by simply dropping several drops of urine onto a small amount of reagent. Both of these reagents can be purchased in any supply house. The presence of protein (so-called albumin) in urine can best be done by means of Exton's test,[11] using sulfosalicylic acid rather than the older methods using nitric acid, or heat and acetic acid.

Much can be learned from examination of the urinary sediment, especially the finding of heme casts, in event of decreased urinary output in cases of lower nephron nephrosis occurring after traumatic shock, sulpha poisoning, prolonged subcritical blood pressure, crushing injuries, or hemolytic transfusion reactions. Even the estimation of the repeated daily output of urine in critically ill patients postoperatively, or those with high fevers, intestinal obstruction, or the conditions just mentioned, is of more value than the many blood chemical studies which are commonly ordered. Calling attention again to this source of information[8] about the patient is one of the most important additions to the literature of the last few years.

BLOOD CHEMISTRY

From the laboratory standpoint, the more general use of photoelectric colorimetry has been the greatest advance in the last few years. The electric eye has been substituted for the human eye and the technician has been eternally grateful. However, these new instruments have their flaws. They can give as much trouble as postwar automobiles, and must be treated as carefully. They have made many common tests more simple, have allowed newer modifications of many determinations, have cut down much labor and time, and at the same time have given more nearly accurate results.

Of particular importance lately has been the more general use of determining the amount of protein in the blood. The surgical literature and experience of most of us has shown beyond doubt the importance of maintenance of proper total protein and albumin levels in the blood for proper healing of wounds, resistance to infection and control of some types of edema. The substitution of chemical determinations for falling drop techniques is certainly an advance. The commonly used separation of the protein into albumin and globulin is of great value, but further division of the protein into albumins and alpha, beta and gamma globulins by electrophoretic methods has opened up a new field. By this method with the Tiselius apparatus, a graph roughly comparable to those obtained by spectrophotometric studies of metals is obtained. Enough work has been done to place the antibodies in the gamma globulins and the lipoproteins in the beta globulins. Expense of the apparatus and the length of time necessary to make determinations preclude general use at this time, but it is hoped that both may come down in the not too distant future. Also the use of Evans Blue[6] as an intravenous dye has simplified the determination of total blood and plasma volume and has called attention to the deficit of total protein

Read as a part of the Panel Discussion of What's New before the general meeting at the 77th Annual Session of the California Medical Association in San Francisco, April 11-14, 1948.

in the circulatory system, not measured by determining only the percentage of protein in the plasma. Relatively cheap modes of spectrophotometers can now be obtained, with which rapid and accurate determinations of sodium and potassium are possible, and much more information as to electrolyte and water balance should be available for more general use.

Another important advance has been the more wide use of properly chosen tests for liver function. Here, as in no other field of chemistry, the results must be correlated with the clinical aspects of the case, and the test tube and pipette cannot supplant clinical impressions. Experience with an increased number of cases of infectious hepatitic has shown the value of cholesterol cephalin flocculation and thymol turbidity tests, and the importance of urobilinogen determinations and bromsulphalein determination in the diagnosis and follow-up study of these cases. For a complete review of the use of the multiple tests in liver disease, Watson's articles [14] reporting intensive studies, as well as those of Osgood [9] and Giansiracusa and Althausen,[4] should be read.

In the field of determining renal function, the old standbys of concentration and dilution tests, phenolsulphonephthalein excretion, blood urea or non-protein nitrogen determinations and the urea clearance test have continued to serve excellently. The inulin clearance test in selected cases has proved of value in determining glomerular filtration, since it is excreted by the glomeruli alone. Diodrast has also been used as a sensitive indicator for clearance studies, since in one minute 700 cc. of blood is cleared of diodrast, whereas 125 cc. of blood is cleared of inulin and about 70 cc. of urea normally in the same period.

RH FACTOR

The clinical literature is replete with references on the importance of the Rh factor in obstetrics and the dangers of transfusing Rh negative persons with Rh positive blood. This danger is perhaps too much overemphasized, but certainly one should not make this mistake in the case of young girls, or women in the child-bearing age. From the laboratory standpoint the chief advances in the Rh field have been the refinement of technique in testing bloods for Rh type and determining the presence of antibodies in the blood. This has been possible partly because of the availability of potent serums prepared by purposely injecting Rh negative volunteers (chiefly medical students) with small repeated doses of Rh positive red blood cells. In the past the only satisfactory source has been the occasional mother who had delivered an erythroblastotic baby. Also the addition of protein to serum-red cell mixtures in the form of human serum, bovine albumin, or more simply gelatin, as described by Fisk and McGee,[1] has simplified the determination of Rh type, and of agglutinating or blocking antibodies in the serum. The use of the Coomb's anti-human globulin test has also been of great help in demonstrating the presence of blocking antibodies which occur in the blood of many women giving birth to babies with hemolytic disease of the newborn. These antibodies are capable of combining with Rh positive cells without producing agglutination, and may lead to hemolysis and all its sequelae. This test (Coomb's) is of particular value in determining whether or not the erythrocytes of the newborn have been sensitized. Fisk [2] finds that the gelatin method serves the same purpose, since the cells of sensitized infants are clumped in the gelatin solution whereas those of normal babies are not.

SEROLOGY OF SYPHILIS

The chief advance in the serology of syphilis has been in the attempt to stabilize the antigen used in the commonly used complement fixation and flocculation tests. By proper fractionation of the lipoids in beefheart, Pangborn has been able to obtain a stable fraction called cardiolipin, now commercially available to laboratories, which according to reports [5] from various laboratories summarizing many thousands of tests has given constantly good results with fewer false positive reactions than with the antigens used up until now. Rein's report [10] of the experiences of the Army serologic service has called attention to a variety of diseases in which false positive reactions have been obtained. These include, of course, a high percentage in cases of leprosy and malaria, but also a lower percentage of cases of febrile diseases such as virus pneumonia, upper respiratory infections, and infectious mononucleosis. These false positive reactions on the whole were weak and disappeared slowly within a period of three months or less. It is hoped that the use of cardiolipin antigen will decrease the number of these false positive tests in the diseases mentioned, as it has nearly completely in a large series of malaria cases.

BACTERIOLOGY

To mention what's new in bacteriology would necessitate discussion of nearly all the common bacterial diseases. However, of most clinical importance has been the more widespread use of concentration methods for demonstration of tubercle bacilli in large amounts of sputum—one or three day specimens—or in material obtained by gastric lavage in those patients who expectorate little. The use of cultures for tubercle bacilli is a step in advance—but the guinea pig will still be used as much as ever, and preferably more. The use of a chamber containing about 10 per cent carbon dioxide has been obligatory in the isolation of fastidious organisms, especially the gonococcus, meningococcus, bacillus abortus, and influenza bacilli, but bacteriologists have found that even the common pyogenic organisms grow much better in this medium than in air. Some bacteriologists now use the CO_2 chamber for routine culture work. Also of great help to the clinician has been the determination of sensitivity of offending bacteria to the sulfa drugs, penicillin and streptomycin.

HEMATOLOGY

The chief advance in hematology in the last few years has been the more common use of studies of bone marrow, obtained usually from the sternum or the crest of the ilium or from the spinous process of a vertebra. Certainly this is not needed in most cases of leukemia or the common anemias, but in questionable cases, especially in those with unexplained leukopenia, anemia or splenomegaly, much help may sometimes be obtained. However, this procedure is not the "open sesame" to a diagnosis that some would have us believe.

Damashek's reports of the presence of hemolysins demonstrable by newer methods in the blood of certain types of acquired hemolytic anemia has opened up this field again, and it is hoped that in the next few years others may demonstrate the same findings and clear up this rather muddled subject, both from the standpoint of diagnosis, and treatment.

SUMMARY

Many new tests and techniques have been added to the scope of clinical pathology in the last few years. Few of these will supplant most of the well known, commonly used tests of today. A new test may be merely a special, expensive method of obtaining information, or it may be invaluable and to the point. One test, or a few tests, if carefully selected, will suffice for all but the rare case. No laboratory investigations can supplant proper clinical study of a patient, and no laboratory gadget will ever replace a keen clinician's mind.

100 Congress Street.

REFERENCES

1. Fisk, R. T., and McGee, C. A.: The use of gelatin in Rh testing and antibody titration, Am. J. Clin. Path., 17:737 (Sept.), 1947.

2. Fisk, R. T.: Personal communication.

3. Foord, A. G., and Baisinger, C.: Comparison of tests for bilirubin in urine, Am. J. Clin. Path., 10:238 (March), 1940.

4. Giansiracusa, J. E., and Althausen, T. L.: Diagnostic management of patients with jaundice, J.A.M.A., 134:589 (June 14), 1947.

5. Giordano, A. S.: Culbertson, C. S., and Higginbotham, M. W.: Cardiolipin antigens in serologic tests for syphilis, Am. J. Clin. Path., 18:193 (March), 1948.

6. Gregersen, M. I.: A practical method for determination of blood volume with the dye T-1824, Jour. Lab. & Clin. Med., 29:1266 (Dec.), 1944.

7. Hawkinson, V., Watson, C. J., and Turner, R. H.: A modification of Harrison's test for bilirubin in the urine, J.A.M.A., 129:514 (Oct. 13), 1945.

8. Lucke, B.: Lower nephron nephrosis, Military Surgeon, 99:371 (Nov.), 1946.

9. Osgood, E. E.: Interpretation of liver function tests, J.A.M.A., 134:585 (June 14), 1947.

10. Rein, C. R., and Elsberg, E. C.: Studies on the incidence of false positive serologic reactions for syphilis, Am. J. Clin. Path., 14:461 (Sept.), 1944.

11. Todd and Sanford: Clinical diagnosis by laboratory methods, 10th Ed., W. B. Saunders Co., p. 94, Philadelphia.

12. Watson, C. J., and Hawkinson, V.: Semiquantitative estimation of bilirubin in the urine by means of the barium strip modification of Harrison's test, J. Lab. & Clin. Med., 31:914 (Aug.), 1946.

13. Watson, C. J., and Hawkinson, V.: Studies of urobilinogen. VI. Further experiences with the simple quantitative Ehrlich reaction, Am. J. Clin. Path., 17:108 (Feb.), 1947.

14. Watson, C. F., and Hoffbauer, F. W.: Liver function in hepatitis, Ann. Int. Med., 26:813 (June), 1947.

Anticoagulant Therapy in Postoperative Venous Thrombosis

J. William Hinton, *New York*

THROMBO-EMBOLIC disease of the venous system following surgical procedures has attracted tremendous interest among internists and surgeons during the past decade.

Ochsner[10] has divided thrombo-embolic diseases into two groups: Thrombophlebitis and phlebothrombosis, and this classification has been of real clinical help.

Thrombophlebitis is characterized by infection in the vein accompanied by perivenous lymphangitis. This disease is easily recognized clinically because the patients present an elevation of temperature, redness and swelling of the leg, and redness occasionally along the course of the vein.

The treatment of this type of venous thrombo-embolic disease is relatively simple. With elevation of the extremity and rest, plus the use of anticoagulants, fatal pulmonary emboli seldom occur.

Phlebothrombosis is characterized by a clot in the small venules which gradually travels upward. Very little perivascular inflammation is noted. The temperature is very slightly elevated and the condition is frequently not recognized until a fatal embolism has resulted. The mechanism of this type of thrombo-embolic disease is not altogether clear. Bancroft[4] in reviewing 2,000 surgical cases stated that the patients fall in the so-called clotting group having a high prothrombin and fibrinogen index. Loewe[9] stresses the significance of clumping of erythrocytes in the dilated arterioles, which he attributed to the loss of plasma in the highly permeable vascular wall. He refers to these stranded red cells as a sludge. He also emphasizes that the blood platelet count rises rapidly in the immediate postoperative period and the platelets become hyperadhesive, reaching the maximum about ten days after the operation. All these mechanisms would contribute, of course, to the formation of intravascular clots in the small venules, which may extend to the larger veins.

Early detection of phlebothrombosis is difficult. If a patient has a minimal elevation of temperature and every other source for such a temperature has been excluded, then the presence of an intravascular clot should be suspected. Homans[7] has drawn attention to the fact that if the foot is hyperextended, causing extension of the gastrocnemius muscle, the patient complains of pain in the calf, whereas when lying normally he is unaware of any discomfort. This is a simple test and should be done by the resident staff or the attending surgeon on any patient who may run an unexplained minimal temperature.

Read as a part of the Panel Discussion of What's New before the general meeting at the 77th Annual Session of the California Medical Association in San Francisco, April 11-14, 1948.

All surgeons realize the seriousness of venous thrombosis which, if unrecognized, frequently results in sudden death. In a report of 1,665 cases of thrombo-embolic disease developing in surgical patients at the Mayo Clinic,[5] it was found that in 405, or 24.3 per cent, pulmonary embolism occurred in the absence of clinical or necropsy evidence of venous thrombosis. This report included 135 cases of fatal embolism, 87 of which came to autopsy. These figures indicate the importance of early diagnosis and prompt therapeutic procedures to eliminate the venous thrombosis.

From the report of the Mayo Clinic,[5] it is obvious that early diagnosis of venous thrombo-embolic disease is difficult. In only 1,260 of a total of 1,665 cases was the diagnosis made either clinically or at autopsy. In the remaining 405 cases or 24.3 per cent in which pulmonary embolism occurred there was no clinical or necropsy evidence of venous thrombosis. This suggests that the entire thrombus became detached.

TREATMENT

Neither medical nor surgical management of venous thrombo-embolic disease is clear-cut. There are those who advocate early surgical treatment and others who rely exclusively on anticoagulants.

Anticoagulation therapy may take any of the following forms:

1. Heparin intravenously.
2. Heparin subcutaneously.
3. Heparin in Pitkin's menstruum.
4. Heparin and Dicumarol.
5. Dicumarol alone.

Heparin intravenously is not generally used because a continuous intravenous infusion requires constant nursing supervision and recording of the clotting time every hour or every two hours. This form of treatment is expensive and difficult to administer.

Bauer[6] and Jorpes[8] of Sweden administered Heparin subcutaneously every three hours without any ill effect. Fifty to 70 mg. of Heparin may be given, the amount depending on the weight of the patient. Clotting time tests by the Lee-White technique should be done before administration of Heparin, a half hour afterwards, and preferably two and a half hours later. However, the Swedish investigators do not observe clotting times so carefully, and they report no ill effects. A high elevation in the clotting time usually occurs within 30 minutes after subcutaneous injection and the clotting time will usually reach 15 to 20 minutes before the three-hour period has elapsed.

The Pitkin menstruum advocated by Loewe,[9] consisting of Heparin in 18 per cent gelatin, 8 per cent

dextrose, 0.5 per cent glacial acetic acid with distilled water to make 100 per cent, can be given subcutaneously. Loewe advocates using 300 mg. subcutaneously every two days, but some individuals are hyperreactive and others are hyporeactive and therefore variation of the dosage may be necessary. Some individuals who weigh much more than 150 pounds and are hyporeactive are given 400 mg.; very thin people, who may be hyperreactive, are given 200 mg. The clotting time by this method can be kept at 30 minutes. Objections to this method of treatment are that it is painful, that abscesses occasionally develop as a result of the injections, and that it is very expensive.

Heparin and Dicumarol may be administered simultaneously. Heparin in a dosage of 50 to 70 mg. given subcutaneously every three hours for 18 to 24 hours, and Dicumarol given by mouth in a dosage of 300 mg. and then reduced to 200 mg. or less, will usually give the desired result.

Dicumarol given alone may be quite satisfactory in those patients who have a true thrombophlebitis and for whom rapid anticoagulation therapy is not necessary. If this method is used the prothrombin activity should be determined by the Quick or Link-Shapiro method, and the clotting time by the Lee-White technique. The first day, 300 mg. of Dicumarol is given and the prothrombin activity determined. Then the dosage can be regulated. The patient should receive 300 mg. of Dicumarol orally once a day until the prothrombin time is 30 seconds, and 100 to 200 mg. if the prothrombin time exceeds 35 seconds. If it exceeds 60 seconds, 72 mg. of Vitamin K should be given intravenously. This will usually bring the clotting time down without difficulty. If a transfusion is given for supportive reasons, the 300 mg. dose of Dicumarol should be given after the transfusion has been completed. One objection to this method is the development of marked susceptibility to the drug; and bleeding tendencies are not uncommon. In patients in the older age group with arteriosclerosis, the drug must be used with extreme caution.

Surgical operation does have a place in the treatment of thrombo-embolic disease of venous origin, and in patients who have repeated pulmonary emboli, interruption of the venous return may be desirable. One of the difficulties in surgical treatment is determination of the exact site of the thrombosis. Some surgeons advocate superficial femoral ligation[1] and also deep femoral ligation.[2] Recently ligation of the vena cava has been advocated.

Experience with patients who really need vein ligation for thrombo-embolic disease has led the author to the opinion that ligation of the vena cava is preferable to other procedures, as it is the only sure means of entering well above the thrombus.

In the Mayo Clinic report[5] 18 (6.6 per cent) of 273 patients with ilio-femoral thrombophlebitis, clinically diagnosed, died of pulmonary embolism. This experience raises a question as to the treatment of choice. Autopsy revealed that in four of these 18 cases, the fatal embolism occurred from 11 to 32 days after the onset of the disease and the embolism came from a fresh thrombus in the opposite ilio-femoral vein. These statistics plus the recent observations of Allen[3] on 1,180 patients operated upon, half of whom were given Dicumarol and the other half not, gives reason for considering anticoagulant therapy for all patients operated upon. Allen found that there were 75 per cent fewer cases of thrombo-embolic disease among the 580 patients given Dicumarol than there were in the 580 not given the drug. There were two deaths from hemorrhage in the group given Dicumarol, but no deaths from pulmonary embolism.

It may be concluded, therefore, that vena cava ligation is preferable in cases needing surgical interruption of the venous system, and that anticoagulant therapy might be indicated as a routine postoperative measure.

130 East 79th Street.

REFERENCES

1. Allen, A. W., Linton, R. R., and Donaldson, G. A.: Venous thrombosis and pulmonary embolism: Further experience with thrombectomy and femoral vein interruption, Jour. A.M.A., Vol. 128, 1945.

2. Allen, A. W., Linton, R. R., and Donaldson, G. A.: Venus thrombosis and pulmonary embolism, Jour. A.M.A., Vol. 133, 1947.

3. Allen, A. W.: Personal communication.

4. Bancroft, F. W.: A review of the various methods used in the treatment of phlebothrombosis of the extremities, N. Y. State Journal of Med., Vol. 46, February, 1946.

5. Barker, N. W., Nygaard, K. K., Walters, W., and Priestley, J. T.: A statistical study of postoperative venous thrombosis and embolism, Proc. Staff Meet., Mayo Clinic, Vol. 16, 1941.

6. Bauer, G.: Heparin in venous thrombosis, Jour. of A.M.A., Vol. 131, 1946.

7. Homans, J.: Varieties of thrombophlebitis of limbs; their origin, course, and treatment, Amer. Jour. of Surg., Vol. 44, 1939.

8. Jorpes, J. E.: Anticoagulant therapy in thrombosis, Edinburgh M. J., Vol. 53, 1946.

9. Loewe, Leo, Rosenblatt, P., Hirsch, E.: Venous thromboembolic disease, Journal of the Amer. Med. Assoc., February 16, 1946, Vol. 130.

10. Ochsner, A., and DeBakey, M.: Therapy of thrombophlebitis and phlebothrombosis, Archives of Surgery, February, 1940, Vol. 40.

What's New in Anesthesia

WESLEY BOURNE, M.D., *Montreal, Quebec*

> We must not only search for, and procure a greater number of experiments, but also introduce a completely different method, order, and progress of continuing and promoting experience.
>
> FRANCIS BACON, *Novum Organum;* Aphorisms. Book 1, *C.*

AS space and time have neither beginning nor end, so too, with man's ingenuity, new things will continue to be accomplished. In the second book of his *Advancement of Learning* Francis Bacon asks the question, "Why should a few favourite authors stand up like Hercules' Columns, to bar further sailing and discovery . . .?" Farther on he quotes from Homer's *Hymn to Pan* that "The ancients have, with great exactness, delineated universal nature under the person of Pan." Among the many titles of this ancientest of gods was "president of the mountains"; and he had the power of striking terrors, especially such as were vain and superstitious, whence they came to be called *panic* terrors. The fable is, perhaps, the noblest of all antiquity, and pregnant with the mysteries and secrets of nature. Bacon points out that Pan was made god of seekers after every natural action, every motion, every process.

Since the days of Bacon and seemingly following his admonition, his counsel, there have been innumerable and prodigious advances in all branches of science. Just now, as is pointed out by E. U. Condon, director of the National Bureau of Standards (Science, January 2, 1948), we are at the threshold of an unimaginable mastery of our material environment, "for science, which provides that mastery, is in its Golden Age." Doctor Condon very plainly sounds the warning note that, "From one point of view life today is a race—a race between knowledge in the physical sciences, which gives material mastery, and general ignorance, which retards or rejects mastery of our environment. Rejection means no more and no less than destruction of civilization as we know and cherish it." One of his many profound and cogent statements is that "Radioactive isotopes will permit us to explore the structures and constitution of molecular aggregates, for such isotopes can be introduced into a system as scientific detectives . . . they can be traced and studied by means of the radiation they emit. Tracer studies of this kind will unravel secrets in biology, physiology, medicine, chemistry, and metallurgy." By the application of this method of investigation we may expect also to have solution of some of the problems which particularly concern the anesthetist. This constitutes something new in anesthesiology, and I know that among others, Tuohy[16] of Georgetown University, Washington, D. C., is actively engaged in investigation involving isotopes.

We may expect valuable new discoveries from tracer studies in salt and water metabolism, in the inorganic as well as in the organic compounds of phosphorus, and in protein metabolism. Indeed, several such studies are being made at present. The anesthetist is interested in some of these. Early last year were published the Croonian Lectures of Marriott,[12] delivered at the Royal College of Physicians in London. They were on *Water and Salt Depletion.* Although this is an old subject, he throws new light upon it as he draws attention to the consequences of wrong treatment and the serious pitfalls in the treatment of different types of dehydration and salt depletion. "The subject is far from being as simple as is often assumed—an assumption which may lead to the control of water and salt administration being left to nurses or junior residents. The essential principle in the treatment of water and salt depletion is that the patient shall be given water or salt, or both, in the amounts that each is lacking. Therefore, as in all conditions, correct diagnosis—in this instance quantitative as well as qualitative—is essential to correct treatment." He gives the facts and principles on which diagnosis depends and points out that "the main questions which arise in practical treatment are: (1) What fluid should be administered? (2) How much? (3) By what route? (4) At what rate?" He deals with each of these very comprehensively, gives definite rules to follow and finishes with the statement: "Water and salt are, perhaps, practically the most important substances it is in our power to administer. They can be so used that they can achieve seeming miracles; or they can be so misused as to lead to a fatal issue. Their proper use is not the simple matter it is often assumed to be."

Marriott intimates that further study is needed particularly of the electrolytes and the acid-base balance. Tracer studies may lend a hand here as we mark sodium, potassium and phosphorus. The physician-anesthesiologist, he of the younger generation, has much with which to indulge his imagination, he may feel the sentiment of the physician-poet, John Keats, in his *Fancy*:

> Ever let the Fancy roam,
> Pleasure never is at home:
> At a touch sweet Pleasure melteth,
> Like to bubbles when rain pelteth;
> Then let winged Fancy wander
> Through the thought still spread beyond her:
> Open wide the mind's cage-door,
> She'll dart forth, and cloudward soar.

During the whole of 1947, midst continuing clouds of social unrest, anesthesia received so many new additions that I know not how to do more than mention some in passing. Smith[14] allowed himself to be the

Read as a part of the Panel Discussion of What's New before the general meeting at the 77th Annual Session of the California Medical Association in San Francisco, April 11-14, 1948.

subject of experimentation while his collaborators made observations. It turned out that his own observations were most valuable. He was given, intravenously over a period of 33 minutes, "a dose of *d*-tubocurarine chloride two and one-half times that necessary for complete respiratory paralysis and adequate for complete skeletal muscular paralysis . . . Inasmuch as no changes occurred in the electroencephalogram, consciousness and sensorium, or in any aspect of higher central nervous system function, it is concluded that *d*-tubocurarine chloride has no significant central stimulant, depressant or analgesic action. Attention is called to the importance of this observation for the proper use of curare as an adjuvant in anesthesia." This last statement is made in spite of the excellent results which Smith obtained when he used curare as the sole agent to provide satisfactory conditions for various types of surgical procedures in infants and children.[15]

Dripps and Sergent[7] reported on the utility of a new curare-like substance, namely, dihydro-beta-erythroidine. This drug paralyzes conduction through the neuromyal junction and has the advantage over curare of not causing the liberation of histamine. (Comroe and Dripps[6] had previously reported that following the administration of curare and some of its derivatives, reactions occurred in the form of skin wheals, bronchospasms, depression of blood pressure and hemorrhage into the intestinal tract. The clinical significance of these reactions to the anesthesiologists is not as great as to physicians who might employ curare in unanesthetized patients. The reason for this is that anesthesia decreases all anaphylactic and allergic responses, and liberation of histamine falls in this category. Certain it is that bronchospasm and hypotension are seen in anesthetized patients but they estimate the incidence of this to be under 0.5 per cent.)

A disadvantage of the new curare-like substance is its tendency to cause a great depression of blood pressure. It is a crystalline substance which can be weighed out accurately and need not be subjected to bio-assay. Comroe and Dripps are continuing to use it. Griffith of Montreal, it is true, did make a great contribution to anesthesia when, in 1942, he introduced the use of curare.

Quite recently, Dripps and his co-workers have made several valuable additions to knowledge in anesthesia. I shall tell of two more of them:

1. Their work on the responses of normal man to low oxygen mixtures.[8] It was interesting to note that the respiratory response was an unpredictable affair and it was not until mixtures as low as 10 per cent oxygen were reached that there was any major respiratory stimulation. Even at 8 per cent oxygen, some people showed no increase in breathing. This is contrary to the teaching in the current textbooks of physiology. They found that the pulse rate was a better index of hypoxia than was respiration. Even at 16 to 18 per cent oxygen there was some increase in pulse rate and this progressed in a straight line relationship. This fundamental type of work they plan to extend to anesthetized subjects. They say that "as anesthesiologists we must not only know what normal man does but be also concerned with how these responses are affected by narcosis."

2. They present data which suggest that the hypotension not infrequently seen at the conclusion of cyclopropane anesthesia is related in part at least to an abnormally high level of carbon dioxide in the arterial blood during anesthesia.[9] This increase in arterial carbon dioxide tension results from the respiratory depressant action of cyclopropane. In an empirical manner, I have noticed for quite some time that through the reduction of the oxygen percentage by the addition of nitrogen so that during the administration of cyclopropane there will be approximately 20 per cent of cyclopropane, 30 per cent of oxygen and 50 per cent of nitrogen, this "cyclopropane shock" does not occur. I do not know how to explain, and it would seem that still further investigation is needed.

While on the theme of cyclopropane, it is important to recount that Beecher[2] and his associates have just completed some works "which indicate that the circulation in the capillary beds is cut down by cyclopropane. This is inferred from the marked curtailment of lymph flow collected under standardized conditions. This also fits in well with the observations of Chambers and Zweifach, who observe that "the capillary beds under cyclopropane were far less active than under ether." And they "have measured the renal blood flow, by the technics of Homer Smith, in man and have found that cyclopropane produces considerably greater restriction of renal plasma flow than was the case under ether. These observations all fit together." Beecher[2] has made several interesting and valuable contributions to the literature of anesthesia during 1947, and lately has told me that "another line of work which will soon be ready for publication is our study of the great family of amidones. I do not believe it is too strong a statement to make, to say that these constitute the greatest advance in the field of narcotics that has transpired in decades."

Through the past year Burstein and his associates have been doing some good work on anesthesia for thoracic surgery,[3] in which they stress the importance of protecting the patient from untoward reflex changes, the importance of ample oxygenation and of carbon dioxide elimination. Their technique is so substantial that it permits of momentary modifications and changes, and they practice "compensated respiration," a term applied to the assisting of spontaneous breathing in combating "pulmonary decompensation." Burstein[4] has developed some newer concepts in the utility of intravenous procaine to reduce cardiac irritability during general anesthesia and to prevent cardiac hyper-irritability in patients with pre-existing cardiac disease who are to be anesthetized with cyclopropane. The dose of procaine has been increased from 50 mgm. to 100 mgm. in a 1 or 2 per cent concentration. In an excellent review, Trifari and Martin[17] bring the subject of intravenous anesthesia right up to date, and comment very favor-

ably on the employment of this method of giving pentothal, curare, procaine and morphine.

Properly to answer the question "What's New in Anesthesia?" would require much more time than is practical in a restricted symposium, it may suffice therefore just to mention a few more new things which are at the moment particularly appealing. New vasopressor drugs continue to come to the fore, for example that described by Jackson[11] and called EA-83, or 2-methylamino-6-hydroxy-6-methyl heptane, or 2-methylamino iso-octanol. He categorizes it as sympathomimetic and finds it to hold special promise as a strong heart and circulatory stimulant in cases of circulatory collapse. Barrett[1] has described the analeptic effect of sodium succinate on barbiturate depression in man. He thinks very highly of this substance. Spinal anesthesia in obstetrics is on the increase and has been dealt with very comprisingly by Cullen and Griffith.[5] Then there are the studies on diffusion respiration by Draper, Roth, Spencer and Whitehead.[13] These laboratory workers attribute the survival of dogs, purposely subjected to respiratory arrest under controlled conditions, to the existence of diffusion respiration; and they supply several informative data. Lastly, I shall mention the "jet injection" or hypospray brought forward by Hingson and Hughes[10] and being used concomitantly by Tuohy.[16] They give several possible disadvantages to this new method, but point out as many advantages. They believe the use of the "instrument offers real promise to the medical profession."

It must be said, in conclusion, that I do really believe that the best of all that's new in anesthesia is *the new and widespread interest in the provision of opportunities for those who desire to learn anesthesia.* For each young aspirant, let us increase the timeliness to unfold inclination and to develop thought. Then, with feeling, he may say, with Emerson:

I am not poor, but I am proud,
Of one inalienable right,
Above the envy of the crowd,—
Thought's holy light.

Better it is than gems or gold,
And oh! it cannot die,
But thought will glow when the sun grows cold,
And mix with Deity.

THOUGHT

McGill University.

REFERENCES

1. Barrett, R. H.: The analeptic effect of sodium succinate on barbiturate depression in man, Anesth. and Analg., 26:74 and 105 (Mar.-Apr. and May-June), 1947.

2. Beecher, H. K.: Personal communication.

3. Burstein, C. L., and Alexander, F. A. D.: Anesthesia for thoracic surgery. Management in an Army General Hospital Overseas, Anesthesiology, 8:36 (Jan.), 1947.

4. Burstein, C. L.: Personal communication.

5. Cullen, W. G., and Griffith, H. R.: Postpartum results of spinal anesthesia in obstetrics, Anesth. and Analg., 26:114 (May-June), 1947.

6. Comroe, J. H., Jr., and Dripps, R. D.: The histamine-like action of curare and tubocurarine injected intracutaneously and intra-arterially in man, Anesthesiology, 7:260 (May), 1946.

7. Dripps, R. D., and Sergent, W. F.: Use of a new curarizing agent, dihydro-beta-erythroidine, for the production of muscular relaxation during anesthesia and surgery, Anesthesiology, 8:241 (May), 1947.

8. Dripps, R. D., and Comroe, J. H., Jr.: The effects of the inhalation of high and low oxygen concentrations on respiration, pulse rate, ballistocardiogram and arterial oxygen saturation (oximeter) of normal individuals, Am. Jour. Physiol., 149:277 (May), 1947.

9. Dripps, R. D.: The immediate decrease in blood pressure seen at the conclusion of cyclopropane anesthesia: "Cyclopropane shock," Anesthesiology, 8:15 (Jan.), 1947.

10. Hingson, R. A., and Hughes, J. G.: Clinical studies with jet injection. A new method of drug administration. Anesth. and Analg., 26:221 (Nov.-Dec.), 1947.

11. Jackson, D. E.: The general pharmacological action of a new vasopressor drug, EA-83 (2-methylamino-6-hydroxy-6-methyl heptane, 2-methylamino iso-octane), Anesth. and Analg., 26:1 and 64 (Jan.-Feb. and Mar.-Apr.), 1947.

12. Marriott, H. L.: Water and salt depletion, British Med. Jour., Parts I, II and III, Feb. 15, (p. 245), March 8 (p. 285), and March 15 (p. 328), 1947.

13. Roth, L. W., Whitehead, R. W., Draper, W. B., and Spencer, J. N.: Studies on diffusion respiration II and III, Anesthesiology, 8:294 and 524 (May and Sept.), 1947.

14. Smith, S. M., Brown, H. O., Toman, J. E. P., and Goodman, L. S.: The lack of cerebral effects of D-tubocurarine chloride, Anesthesiology, 8:1 (Jan.), 1947.

15. Smith, S. M.: The use of curare in infants and children, Anesthesiology, 8:176 (Mar.), 1947.

16. Tuohy, E. B.: Personal communication.

17. Trifari, L. M., and Martin, S. J.: Civilian and military aspects of intravenous anesthesia, Anesth. and Analg., 26:45 (Mar.-Apr.), 1947.

QUESTIONS AND ANSWERS

Question: Dr. Bourne, what are the added dangers in spinal anesthesia in obstetrics, and how may these be prevented or modified?

DR. BOURNE: The chief danger is the likelihood of the anesthesia becoming too high, seemingly on account of the increased intra-abdominal tension in pregnancy. Small doses of whatever drug is used ought to be employed and they should be made heavy by using a solvent of 10 per cent dextrose. Air bubbles must be avoided, injection ought not to be made while the uterus is contracting, and the patient must be postured with great care. An analeptic should be in readiness for prompt intravenous administration should the blood pressure fall immoderately, and oxygen ought to be given routinely. Another danger, or rather, disadvantage, is that of headaches. These are more apt to occur after spinal analgesia in obstetrics than otherwise, perhaps on account of the greater activity of the patient. These headaches may be modified by closer attention to posture and by the judicious increase in the use of sedatives.

What's New in Radiology

WILBUR BAILEY, M.D., *Los Angeles*

RECENT developments in surgical techniques permitting relief of many developmental abnormalities in the heart and great blood vessels have focused the attention of radiologists on ways to get diagnostic and preoperative information regarding the anatomic and functional abnormalities of these structures.

The aorta can be given the opacity necessary for roentgenographic examination by injecting an opaque substance into it just above the level of the renal arteries; the great vessels in the neighborhood of the heart can be filled by injecting the substances into the vessels of the arm or neck. Cerebral angiograms can be made by injecting an opaque substance such as Thorotrast into the carotid artery. All these methods are being used more frequently, as is the injection of opaque substance into the veins of the lower extremity so that the patency of the veins can be determined by roentgenography.

By far the most dramatic recent development is a practical method for venous catheterization of the heart. A team of three to five physicians accomplishes this by using a radio-opaque woven silk catheter which has a curved tip. This catheter, about 100 cm. long, is introduced into the median basilic vein in either the right or left antecubital space after novocaine anesthesia. It is threaded into the vein and aimed at the desired area by pushing or twisting the proximal end. Once the catheter gets beyond the axillary vein the possibilities for further travel include all of the great veins. It may, for example, go into the jugular vein, it may by-pass the heart and go into the inferior vena cava and then enter either the right or left renal vein, or it may go into one of the hepatic veins.

By patience the tip can be maneuvered under fluoroscopic guidance into the right auricle and thence through the tricuspid valves into the right ventricle. Pressure measurements and blood specimens can be taken as each new region is entered. The tip of the catheter may then proceed further into the pulmonary artery and may even reach out to occlude one of the smaller branches of the pulmonary artery. When the tip of the catheter goes this far, the findings are of particular interest, because suction on the tube will cause the blood to flow in a reverse direction through the regional lung capillaries, with the result that blood showing 95 per cent oxygenation will be obtained.

Valuable data for accurate diagnosis can be obtained by analyzing specimens of blood from the various chambers of the heart for oxygen content, and correlating this data with manometric readings. Such findings are of great help because of the present vast improvements in corrective surgery for congenital abnormalities of the heart and great vessels. Auricular or ventricular septal defects can be accurately recognized by venous catheterization, for in either case the oxygenated blood from the left side of the heart will be revealed by its high oxygen content.

The tetralogy of Fallot or patent ductus arteriosus can likewise be distinguished because of abnormally high manometric readings. The size of a cardiac chamber is sometimes clearly outlined by a catheter which forms a loop or two within this structure. Except for occasional extra systoles which may occur when the tricuspid valve is being passed, there have been no untoward symptoms in more than 100 cases in which this procedure has been done by a Boston group. Autopsies on patients dying from other causes revealed no abnormalities in the heart or great vessels which might have been attributed to the catheterization.

Cerebral angiography, although it has been employed for many years, is becoming increasingly more popular in this country because of the satisfactory way in which the cerebral blood vessels can be outlined. By making a series of films separated by very short intervals, it is possible to make an arteriogram, followed by a capillary phase, followed by a venogram, all on the same patient and at the same time. Intracranial aneurysms, 80 per cent of which are congenital in origin, are readily demonstrated by such methods, as are arteriovenous fistulae, hemangiomata and various brain tumors which have a particularly rich blood supply. If obstruction of the sagittal sinus is present, corollary vessels such as the facial vein are clearly outlined.

In discussing modern trends in radiology, the increasing popularity of various different methods of pelvimetry should be mentioned. With the more accurate information obtainable with modern methods, roentgen pelvimetries in all cases in which diagnosis is doubtful, and as a routine for all primiparas, are rapidly becoming a standard procedure.

When it comes to the consideration of advances in radiation therapy, no discussion would be complete without mentioning that the greatest present problem is what to do about too much radiation. We have known for years about the effect of over-irradiation on a chronic basis, because of occasional patients such as watch-dial painters who pointed radium-containing brushes with their lips, over-enthusiasts who drank radioactive waters in great quantities, and patients who were exposed accidentally to large doses of x-rays over the entire body.

It remained for the atom bomb explosion at Hiroshima to demonstrate the acute effects of generalized over-irradiation on a large population. Such over-

Read as a part of the Panel Discussion of What's New before the general meeting at the 77th Annual Session of the California Medical Association in San Francisco, April 11-14, 1948.

irradiation could become the No. 1 medical problem in the United States at any time. To my knowledge, there are no cures of promise yet known. Ground, water, or clouds polluted by radioactive materials are remarkably difficult to decontaminate, as the Navy has indicated by recently sinking some of the ships used several years ago in the Bikini experiments because they remained hopelessly radioactive.

This long life of some of the radioactive isotopes—radioactive carbon, for instance, has a half life of 6,000 years—makes dangerous contamination with its threats to personnel a constant hazard. In one laboratory in which radioactive isotopes had been used some six years ago, a check of the drains and sewer pipes revealed these structures still to be giving off radioactivity. Because contamination is so easy, it must be given constant consideration by those who handle radioactive isotopes. Such handling is to be done preferably by workers who from experience respect radioactive material. Appropriate means of detecting radioactive material which has leaked or spilled should be available.

The generalized effects which might be expected from the intravenous use of such isotopes as P-32 were predictable, because of earlier experiments with intravenously injected radium and its decomposition products. Now that more than ten years has elapsed since P-32 was first used for leukemia and other blood dyscrasias, many workers feel it has no advantage over the usual type of radiation therapy. Small doses of P-32 are of definite value in polycythemia vera. Whether better than other forms of radiation therapy or phlebotomy remains a moot question.

When it comes to the specific use of radioactive isotopes for the purpose of affecting particular organs or tissues, fields of tremendous interest are opened. Isotopes can be used as tracer substances, or if enough of the substance is absorbed by the tissue in which radiation therapy is desired, isotopes can be used for their therapeutic effect.

Radioactive iodine is, of course, the prime example of an isotope which is accumulated in sufficient concentration to exert a definite effect on a particular tissue—in this case the thyroid. Within a few hours after the ingestion of radioactive iodine the normal thyroid collects up to 80 times the quantity to be expected from uniform diffusion into the general body tissues and the hyperplastic thyroid may be expected to collect up to several hundred times this quantity.

Although the treatment of hyperthyroidism is still in the experimental stage, it has now been proven on both human beings and animals that the gland can be fibrosed completely or made hypoactive by administering radioactive iodine orally. This method seems likely soon to become the treatment of choice.

Of course, everyone wants to know whether cancers of the thyroid can be treated by radioactive iodine. Unfortunately, radioactive iodine is seldom effective in such cases, because malignant thyroid tissue—like all tumor tissue—often tends to be very primitive in nature and, therefore, loses its ability to pick up iodine from the blood stream. There are a few cases on record, however, in which adenocarcinomata have demonstrated this ability.

An interesting example is the case of a five-year-old boy from whom a carcinoma of the thyroid was apparently completely removed. However, in a few weeks large masses appeared in both sides of the neck. A tracer dose of radioactive iodine showed by Geiger counter measurements that these masses took up approximately 2,000 times as much iodine as did the normal tissue. Because of this enormous selectivity, it was possible to give this small child 14 mc. of radioactive iodine and to have nearly all of it absorbed in the malignant recurrences. Although the number of lymphocytes dropped somewhat as a result of this heavy dose, the count soon returned to normal, but the masses in the neck disappeared. Four months later, after the patient had been given 20 mc. of radioactive iodine he actually developed myxedema. This child, who was obviously incurable from a surgical or any other point of view, has shown no sign of recurrence for a period of one and a half years.

In giving radioactive iodine it is always important that no iodine as Lugols solution or in any other form be given for three or four weeks previously. Otherwise the thyroid may retain less than the 75 to 80 per cent of the radioactive iodine which it usually attracts, with consequent danger to the kidneys because of rapid excretion of the radioactive isotope.

Of course, the whole problem in radiation therapy has always been to have the radiation affect the tumor tissue, while the normal tissue was not too severely damaged. If we can find the chemical which will concentrate sufficiently more in malignant tissue than in normal tissue, it should not be difficult to find an appropriate isotope with a suitable half life and energy value to destroy the malignancy.

Research is being done in an effort to develop one of the azur dyes which will be selectively absorbed by tumor tissue. If this proves to be possible, boron could be incorporated with such a dye, after which the region could be irradiated with slow neutrons. This type of irradiation would cause the boron nucleus to disintegrate, and thus to form numerous Alpha particles which, though short-lived, have a very intense ionization path, and which, if already located in the tumor tissue, would be extremely destructive to it. Attempts are being made to link radioactive isotopes to amino acids or to sex hormones with the same idea of getting enough radiation at the right time and right place to produce a cancericidal effect.

When it comes to using radioactive isotopes as tracers, the possibilities seem endless. With them biologists and physiologists are learning about the major metabolic processes concerning the synthesis of fats, proteins and carbohydrates. Even the molecules used in insecticides can be tagged and the insects' viscera later analyzed to find out which part of the molecule has done the work. Radioactive sodium can be used to determine the patency of

arteries and the distribution of body fluids. Penicillin in an aerosol distributed by means of a nebulizer can be checked by this method to see if it reaches the periphery of the lungs. (It does.)

Recently a surgical Geiger counter has been developed for use during thyroidectomies, particularly those in which any sort of aberrant tissue is anticipated or has been previously demonstrated by tracer study. With such a simple tool the surgeon can make certain that he does not leave behind any intrathoracic extensions, or, in the case of thyroid carcinoma, any involved glands in the cervical lymph chain.

Another new development which may prove to be of great future importance in radiation therapy is the Betatron. This machine operates at voltages as high as 100 million and pours out a stream of Beta particles (electrons), which theoretically can be regulated by changing the voltage so that most of the ionization will be absorbed at a predetermined depth at which the cancer is located. Under these circumstances there should be very little effect on the skin or other normal tissues.

Extremely short wave length x-radiation such as is generated by 100 million volts results in three to twelve times as much ionization beneath the skin as is received on the skin surface. Since the possibility of skin damage is always a limiting factor in irradiation by x-rays, further research with these extremely high voltages may prove fruitful.

With the larger amounts of radium which are now available, one of the decomposition products of radium—Radium D—can be obtained in applicator form. Radium D has the great advantage that it gives off pure Beta rays which are relatively non-penetrating. Thus we can treat such ophthalmic diseases as vernal catarrh, corneal ulcers, recurrent pterygium, and interstitial keratitis without fear of damaging the underlying lens, for the effective penetration of Radium D is less than 3 mm.

So long as the new forms of radiant energy are directed in small amounts to the cure of the diseases of man, we may be grateful for their discovery.

2009 Wilshire Boulevard.

QUESTIONS AND ANSWERS

Question: Dr. Bailey, what should be done to render left-over radioactive isotope materials safe to personnel?

Answer: The chief answer is to treat such material with great respect. Human beings can tolerate a certain amount of radiation. We all get continuous radiation from the cosmic rays of the sun, and from experience we know that small daily doses of radiation can be tolerated. In order that such doses shall not be exceeded, however, radioactive materials must be carefully shielded in lead, and laboratories where they are used should have a Geiger counter available so that spillage or possible leakage can be checked with regularity.

The article on What's New in Dermatology, by Henry E. Michelson, M.D., Minneapolis, which was read as a part of the "What's New" panel discussion, has not been received. It is scheduled for publication in a later issue of *California Medicine.*

Syphilis in Pregnancy

CHARLES W. BARNETT, M.D., and JOHN M. READ, *San Francisco*

THE importance of syphilis in the mother during pregnancy has been emphasized repeatedly, particularly in regard to its effect upon the status of the child. This emphasis has been carried, in fact, almost to the point of a phobia as is shown by the widespread use of such terms as "disastrous outcome" or "syphilitic tragedy" when a child is stillborn or has syphilis, and "salvaged baby" when it is normal. It is reasonable to suppose that an investigator who uses such terms will be unlikely to view his data with critical and unbiased judgment and one is inclined to regard his conclusions with suspicion.

Most of the reports on the outcome of pregnancy in women with syphilis have come from obstetrical services and in nearly all there is lacking a clear explanation of the means by which a diagnosis of syphilis is established in the mother or the child. In mothers, the diagnosis usually depends on the serologic tests but reports rarely state whether the tests are strongly positive or whether they are regularly confirmed before treatment. In infants, the diagnosis is usually said to be based upon serologic tests, roentgenograms of the long bones, examination of the placenta and clinical observation of the child, but never is the exact role of these various factors specified. In most cases the diagnosis of syphilis seems to have been made as a result of positive serologic tests on the child at some specified time, usually one or two months, after birth, although it has been pointed out repeatedly that only by serial quantitative tests can the diagnosis be made with assurance, in the absence of clinical signs. We believe that many of the previous reports on this subject are unduly pessimistic in their attitude toward the effect of syphilis on the outcome of pregnancy, and the series of cases to be presented supports this belief.

This report is based upon the records of a group of patients from the Syphilis Clinic of the Stanford University School of Medicine. Three hundred and forty-one babies were born to 243 mothers during a period of a little over 15 years. One hundred and fifty-five of the mothers and 232 of the infants were white and the rest were negro. One hundred and eighty-five of the infants were male. Subdivision of the series according to race or sex of child revealed no significant differences and therefore the series is considered as a whole.

This clinical material differs in some respects from that presented by previous investigators. It was collected through the diagnosis file of the syphilis clinic and no patients who were not examined in that clinic are included. Deliveries that occurred prior to the registration of the mother in the syphilis clinic are not indexed and consequently almost no cases are included in which syphilis was not discovered until the time of delivery. The result is that we have very little completely untreated syphilis and a larger number of adequately treated cases, particularly among those treated before pregnancy, since many of our treated patients return to the clinic for subsequent prenatal care and delivery.

For patients who are receiving prenatal care, the obstetrical service sets up separate records which eventually get into the history but are not available during pregnancy. When abortion is threatened or when the child is known to have died in utero, the patient is frequently transferred to the San Francisco Hospital, and the Syphilis Clinic then has great difficulty in discovering the outcome, particularly with respect to whether or not the product of conception was examined and whether or not it showed evidence of syphilis. As a result, our figures on the incidence of abortion and stillbirth are quite incomplete and we have eliminated them entirely except for a few cases in which careful autopsies have been performed. In these circumstances, the child is classified as syphilitic if evidence of the disease is found, and as non-syphilitic if careful examination and spirochete stains show no evidence of the infection and there is sufficient reason for fetal death otherwise. Two such cases are included in the data on syphilitic infants and two among the non-syphilitic.

The role of syphilis in the production of abortion and stillbirth is somewhat uncertain. There is no doubt that the infection is responsible for a great many such terminations of pregnancy, but the custom of assigning all these accidents to syphilis when they occur in women who have the disease is to be deplored, since women who do not have syphilis also have abortions and stillbirths in appreciable numbers. In various reports on syphilis in pregnancy, the incidence varies widely. Thus Halloran [3] reports 12.5 per cent, McKelvey and Turner [7] 45.9 per cent, and McCord [6] 66.4 per cent of such terminations in mothers who have had no anti-syphilitic therapy. Both of the last two note a drop in this proportion to slightly over 10 per cent after extremely small amounts of treatment in the last few weeks of pregnancy. Such figures are distinctly misleading. Most syphilitic stillbirths occur from the sixth to the eighth month as a result of premature fetal death and it is much more probable that women who have entered the last month of pregnancy have somehow evaded the danger of fetal death, than that they have been saved from it by an insignificant amount of last-minute therapy.

We feel that the elimination of stillbirths from the data does not detract from the value of this study. A pregnancy that ends without a living child is an unpleasant experience for the mother that by no means approaches the distress that is caused by a

From the Departments of Medicine and Pediatrics, Stanford University School of Medicine, San Francisco.

Read before the Section on Dermatology and Syphilology at the Annual Session of the California Medical Association in Los Angeles, April 30-May 3, 1947.

living but chronically ill or defective child. We are primarily interested in the child that is born alive and we cannot subscribe to the use of such terms as "disastrous outcome" for those who do not survive the fetal period.

When an infant is born alive to a syphilitic mother, it may have some clinical evidence of syphilis at the time of birth or soon afterward, such as a skin eruption with positive darkfield, treponema pallidum in the umbilical cord or definite roentgenographic evidence of syphilis in the bones. In these circumstances, the diagnosis of congenital syphilis can usually be made promptly. When no clinical evidence of infection exists, the tests of blood from the cord may be positive or negative and in either case the diagnosis must be postponed, pending a period of further observation.

In recent years, roentenogram of the long bones, formerly considered an essential procedure in diagnosis, has fallen into some disrepute. In many infants with syphilis, the bones are normal, while in some normal infants confusing bone changes occur that make a diagnosis on this basis somewhat uncertain (Dill,[2] Ingraham,[4] Miller[8]). Examination of the placenta has also been shown to be of relatively little value in diagnosis.[2,8] Neither of these methods has been employed regularly in the present series. Many of the placentas were examined but rarely were any changes found that seemed to be of diagnostic significance.

The proof of syphilis in the infant depends, therefore, on clinical evidence of the disease at birth or during the first few weeks of life, or on tests on cord blood and on the blood of the infant, examined at intervals during its early life. These tests should be carried out by some quantitative procedure that permits a measure of the trend of the titer, and the diagnosis should never depend upon the persistence of a positive qualitative test for an arbitrarily selected period of time. The infants in this series were considered on this basis and the means by which the diagnoses were made will be explained. The children were examined, tested and treated by physicians in the Department of Pediatrics, and, although the follow-up was not always as thorough as it might have been, we believe it is possible to separate the syphilitic from the non-syphilitic infants with a considerable degree of certainty, as will be shown.

Two infants were stillborn and macerated and autopsy showed both to be infected heavily with treponema pallidum. These were the only cases in which an immediate clinical diagnosis of syphilis could be made. In three others darkfield positive lesions appeared in six weeks or less, with a rising serologic titer in the blood. In one of these there was a negative reaction in the cord blood, but the child's blood was weakly positive at five days and rapidly became strongly positive. In two more, a rising titer in the blood plus roentgenographic evidence of periostitis led to a diagnosis and in a third the roentgenographic evidence was supported by a moderately high but constant serologic titer.

In two cases the diagnosis was made on results of blood tests alone. One infant had a titer of 64 units at birth which remained constant for two months and went up to 256 in the third month. The other started with a titer of 10 units, which increased to 100 units at five weeks when treatment was started. No clinical evidence of syphilis developed in either of these children and they were not apparently injured by the delay in starting treatment. Altogether, there were ten infants in whom a definite diagnosis of congenital syphilis could be established.

In 107 infants, the cord blood was either strongly or partially positive, but the blood of the infant became negative without treatment. There were no recurrences. Sixty-five were followed for more than three months and 31 for over a year, and in no instance did any suspicious evidence of syphilis appear. Only seven were lost from observation in the first month, the others having been followed for a period of time that was sufficient to establish the diagnosis in most of the known syphilitics. There is no reason to suppose that any of these infants had syphilis.

There were 95 infants with negative cord blood reactions that were followed with repeated blood tests for various periods of time, 27 of them for more than a year. In none of them did any clinical or serologic evidence of syphilis appear. Another 99 apparently normal infants were born with negative cord blood reactions but had no further blood tests. Most of these infants had repeated physical examinations and quite adequate clinical follow-up, 75 for more than three months and 41 for more than a year. None developed anything to suggest syphilis and we consider them as uninfected since, with the one exception previously noted, we have never seen a child with a negative reaction in the cord blood develop congenital syphilis and most authorities concede that it is rare.

Another group consists of 30 infants originally diagnosed as having congenital syphilis (for which they were treated) on what appears to be completely inadequate evidence. They were treated prior to 1935 at a time when the urge to treat syphilis on the slightest provocation was exceptionally high. One was treated on the day of birth because of a skin eruption which was not darkfield positive. The results of blood tests were repeatedly negative and the child remained well except for chronic eczema through an observation period of nine years although the antisyphilitic therapy had been totally inadequate. In 11 cases the serologic tests were never stronger than doubtful. In 17 they were positive at birth but in no case was treatment delayed for more than five weeks for confirmation of the tests. In one case the cord blood reaction was positive, but tests of the infant's blood were doubtful at one month and almost negative at two, in spite of which treatment was administered. In no case was there ever any evidence of syphilis other than the serologic tests, in no case was a positive reaction obtained after treatment had been started, and no quantitative tests were performed.

According to Moore,[9] the minimum adequate treatment for early congenital syphilis should com-

prise 32 injections of mapharsen and 32 of bismuth over a period of one year. By this standard, all these patients were undertreated. Only one received adequate arsenical therapy and three adequate heavy metal. In the rest the total treatment was not over half of the required minimum and in only four was it continued for as long as a year.

Twenty-six of these 30 patients were followed for from one to 17 years with an average period of serologic observation of 5.2 years and of clinical observation of 7.3 years. Spinal fluid tests of most of them gave negative results. In none did any evidence of syphilis develop in spite of the inadequate treatment, and we submit that they did not have syphilis at all. The entire group has been included in the non-syphilitic classification, although if they should be discarded from the series, it would not change the results appreciably.

Of the four infants followed for less than a year, two were transferred for treatment to private physicians as soon as the Wassermann tests were found to be positive for syphilis, and they were not followed. The other two were treated, and both died, one at three weeks and the other at seven weeks, of hemorrhagic encephalitis as a result of sulpharsphenamine injections given for syphilitic infections they probably never had.

In the mothers, the diagnosis of syphilis was made on the basis of history, physical findings and blood tests. When it was necessary to make a diagnosis on blood tests alone, the tests were always repeated at least once if the first was strongly positive and several times over a period of several weeks if doubtfully positive. We have never felt that the requirements for a definite diagnosis of syphilis should be altered because of pregnancy or that treatment should be started until a reasonably certain diagnosis had been made. After this study we are more than ever convinced of the propriety of this viewpoint.

The status of the infant according to the time when the mother was treated is shown in Table 1.

TABLE 1.—*Outcome of Treatment According to Time of Treatment of Mother*

Treatment	Outcome	
	Syphilitic	Non-syphilitic
None	5	17
During pregnancy	5	96
Before pregnancy	0	98
Before and during pregnancy	0	120

It should be noted that none of the ten syphilitic infants were born of mothers who had received treatment prior to pregnancy.

The outcome in all women who received no antisyphilitic therapy before the start of pregnancy is summarized in Table 2, according to the number of injections of trivalent arsenic that were given during pregnancy. In nearly every case a corresponding number of injections of bismuth was given in addition. Bismuth alone and penicillin were given to a few patients as noted.

TABLE 2.—*Outcome of Pregnancy According to the Amount of Treatment Given During Pregnancy to Patients Who Had Had None Before*

Treatment	Outcome	
	Syphilitic	Non-syphilitic
None	5	17
Bismuth only	1	3
Injections of arsenic:		
1 - 4	1	14
5 - 9	2	31
10 - 14	1	19
15 or over	0	17
Penicillin	0	12
Total	10	113

From Table 2 it is evident that only a moderate amount of therapy is required to prevent the transmission of syphilis to the infant, since in only one instance was the child infected when the mother was given more than ten injections of arsenic.

All the pregnancies not included in Table 2 were preceded by antisyphilitic therapy. The amount of this treatment together with the outcome is shown in Table 3. Some of these mothers received additional treatment during pregnancy but this had no apparent effect upon the results of the previous therapy.

TABLE 3.—*Outcome of Pregnancy According to the Amount of Treatment Given Before Pregnancy*

Treatment	Outcome	
	Syphilitic	Non-syphilitic
Bismuth only	0	2
Injections of arsenic:		
1 - 9	0	33
10 - 19	0	50
20 - 29	0	45
30 - 39	0	36
40 or over	0	43
Penicillin	0	9
Total	0	218

Although most of these women had received considerable amounts of therapy, it is evident that even small amounts afford a considerable degree of protection if given prior to conception, since 35 pregnancies were preceded by fewer than ten doses of arsenic and an additional 50 had fewer than the standard 20 doses without a single syphilitic baby as a result.

In addition to the amount of treatment administered to the syphilitic mother, there are two other important factors to be taken into consideration. These are the stage of pregnancy in which treatment is started and the duration of the infection in the mother. In all five cases in which a syphilitic child was born after treatment, the infection in the mother was not discovered until the last trimester when the fetus is already infected and treatment necessarily less effective.

The effect of the duration of the infection on the outcome is difficult to determine because of the uncertainty that exists as to the onset of syphilis in most women. In 154 of the cases in this series, there was no clue to the duration whatever. In 96 it was

known to be in excess of four years but the date of onset was frequently lacking, and in 59 it was of less than 4 years' duration. Thirty-two mothers had congenital syphilis. Among the infants who had syphilis, delivery occurred when the infection in the mother was early in five and when the time of infection was unknown, but probably recent, in four. In one case the mother had quite definite stigmata of prenatal syphilis, in spite of which, tests of the child's blood showed positive reactions, with a rising titer and a positive darkfield from the nasal secretions. This mother was untreated and this was the only case observed in which the infection in a late stage in the mother was transmitted to the child.

In 59 pregnancies, the infection in the mother at the time of delivery was known to be early, that is, of less than four years' duration. Although the number is small, the outcome of pregnancy in relation to treatment is of interest and is summarized in Table 4.

TABLE 4.—*Outcome of Pregnancy in Patients With Early Syphilis at the Time of Delivery According to the Time and Amount of Treatment*

Treatment	Outcome	
	Syphilitic	Non-syphilitic
None	2	3
During pregnancy:		
Arsenic, 1 - 9 doses	2	10
10 or more doses	1	11
Penicillin	0	11
Before pregnancy:		
Arsenic, 10 - 19 doses	0	6
20 or more doses	0	6
Penicillin	0	7
Total	5	54

Even with very little treatment, it is not unusual for a woman with early syphilis to give birth to a normal child. This occurred in 13 of 17 patients who were given fewer than ten injections of arsenic during pregnancy. More than this amount of therapy gave almost complete protection against congenital transmission, the single failure in the higher treatment group having been in the case of a mother who had had just ten doses of mapharsen and five of bismuth. The principal period of danger to the infant is certainly when the mother has early syphilis at delivery, but even then transmission is not a certainty, and it may be prevented by relatively small amounts of treatment.

Penicillin given either before or during pregnancy never failed to protect the child from syphilis. In several cases it was given in the last month of pregnancy and in several the total dose was only 300,000 units. This result is in complete agreement with the findings of other observers (Ingraham[5]).

The status of the mother's blood at the time of delivery with regard to reactions to tests for syphilis, is often cited as a factor in determining the transmission of syphilis to the infant. To a limited extent this is true in that a woman who is seronegative at delivery seldom has a syphilitic child. On the other hand it is common for a seropositive woman also to have a normal child. In the ten pregnancies in our series that resulted in syphilitic infants, the reaction of the mother's blood to tests for syphilis was known in nine cases: It was positive in eight and doubtful in one. The comparative results of tests of the mother's blood and of blood from the cord in all pregnancies in which the reaction of the mother's blood was known are given in Table 5. The tests of the mother's blood were not always done at exactly the time of delivery, but were never more than two months away.

TABLE 5.—*Results of Tests on Cord Blood in Relation to Mother's Blood at Approximate Time of Delivery*

Mother's Blood	Number	Cord Blood	
		Positive	Negative
Positive	163	65 (40%)	98 (60%)
Negative	150	21 (14%)	129 (86%)

It will be seen that the infant's blood is much more likely to show positive reaction if the mother's does. However, there is no complete agreement between them, and the diagnosis in the child should be made without regard to the status of the mother.

DISCUSSION

In an inquiry into the effect of syphilis in the mother upon the offspring, the most important single consideration is the accuracy of diagnosis in the child. It has been customary to assume that every abortion or stillbirth that terminates a pregnancy in a patient with syphilis is due to the infection. This is a grossly misleading custom and should be abandoned. If an autopsy shows syphilis in the fetus, the termination may be ascribed to syphilis. If no evidence of the disease is found on careful examination, the infection should not be blamed. If the fetus has not been examined, the case should be excluded from consideration.

When an infant is born alive to a mother with syphilis, a diagnosis of syphilis is justified in the child only when there develops some clinical evidence of syphilis or when serial tests of the blood by a quantitative method show a rising reagin titer. The persistence of a positive qualitative reaction for an arbitrary period of time such as one or two months does not justify a diagnosis of syphilis.

On the basis of our experience, we believe that the danger of transmitting syphilis from mother to child during pregnancy is less than it has generally been considered to be. Only 10 of 341 infants were proved to have syphilis, and these were born of mothers who had had no treatment, or very little, and in all but one of whom the infection at the time of delivery was either definitely or probably early.

In no case in which the mother had received antisyphilitic therapy prior to conception was the infection transmitted to the child. This and similar observations by other observers[7] lead us to disagree sharply with the dictum of the Cooperative Clinical Group (Cole and his co-workers[1]), that "The safer procedure then for every mother who has or ever has had syphilis is to take antisyphilitic treatment throughout each pregnancy."

This policy is absolutely unjustified, since it adds a definite risk and considerable inconvenience and discomfort to pregnancy without demonstrable benefit. Since penicillin is harmless and very effective, one might be justified in using it in these circumstances but it should not be insisted upon if the mother has had a reasonable amount of previous treatment.

When the infection in the mother is early or when she has been untreated before pregnancy, antisyphilitic therapy should always be given, starting as early as possible after gestation, but never unless a definite diagnosis of syphilis can be established. Much more harm can be done by giving treatment on suspicion, thereby permanently preventing proper diagnosis, than is likely to occur if a patient in whom the existence of the disease is questionable is left untreated. Since penicillin is both safe and effective in early congenital infections, a great deal of the hazard of prental syphilis is now removed and one is entitled to take somewhat greater chances with the outcome in the infant to the benefit of the mother than was justified before penicillin was available.

SUMMARY

1. The outcome of 341 pregnancies in 243 mothers with syphilis is reported, according to the time and amount of treatment that the mother received.

2. Only ten infants were found to be infected, none as a result of a pregnancy that had been preceded by treatment.

3. The diagnosis of syphilis in mother and child is discussed together with some factors that affect the outcome.

4. It is concluded that the hazards of syphilis in pregnancy are not as great as they are usually considered to be if the diagnosis of syphilis in the infant is carefully made.

REFERENCES

1. Cole, Harold N., et al.: Syphilis in pregnancy. Cooperative clinical studies in the treatment of syphilis, Reprint No. 46 from Venereal Disease Information, Vol. 17, No. 2 (Feb.), 1936, p. 6.

2. Dill, L. V., Stander, H. J., and Isenhour, C. E.: An evaluation of the effect of antenatal antisyphilitic therapy on fetal mortality and on congenital syphilis, Am. J. Obs. and Gyn., 40:965 (Dec.), 1940.

3. Halloran, Chris R.: A review of the records of syphilitic pregnant women treated at the Los Angeles maternity service over a two-year period, Am. J. Obs. and Gyn., 38:135 (July), 1939.

4. Ingraham, N. R., Shaffer, B., Spence, B. E., and Gordon, J. H.: The adequate diagnosis of infant congenital syphilis, Arch. Derm. and Syph., 43:323 (Feb.), 1941.

5. Ingraham, N. R., Rose, E. K., Beerman, H., Wammock, V. S., Stokes, J. H., and Gyorgy, P.: Treatment of the syphilitic pregnant woman with penicillin in oil beeswax: A comparison of results obtained using aqueous sodium penicillin, to be published.

6. McCord, James R.: Prenatal treatment of syphilis. Some results of antisyphilitic treatment in a series of 519 pregnant syphilitic colored women, Am. J. Syph., 16:78 (Jan.), 1932.

7. McKelvey, J. L., and Turner, T. B.: Syphilis and pregnancy. An analysis of the outcome of pregnancy in relation to treatment in 943 cases, J.A.M.A., 102:503 (Feb. 17), 1934.

8. Miller, Kate Freeman: The effect of syphilis on the pregnant woman and her offspring, Med. Rec., 157:345 (June), 1944.

9. Moore, Joseph Earle: The modern treatment of syphilis; Charles C. Thomas, Second edition, second printing, p. 506.

Discussion by A. FLETCHER HALL, M.D.

I am sure that we all welcome this timely blast from one of syphilology's outstanding iconoclasts. As a matter of fact he is not the first to cite cases in support of the stand which he has taken, although he is the first, so far as I know, to advocate such radical conclusions.

As early as 1927 Birnbaum reported that 21 women presumably cured of syphilis gave birth to 34 normal infants but no syphilitics; in 1934, Cole, reporting the material of the Clinical Cooperative Group, added 54 adequately treated syphilitic women who gave birth to no syphilitic children in pregnancies subsequent to their treatment; in the same year, McKelvey and Turner, reporting on the material at Johns Hopkins Hospital, stated that 59 syphilitic women receiving a minimum of 1 gm. of arsphenamine (three or four treatments) before pregnancy, gave birth to only healthy infants, while those who received no treatment before pregnancy required four to five times as much during pregnancy to prevent the appearance of syphilis in their offspring. These findings parallel those reported to us in Dr. Barnett's paper. Findlay in 1942, commenting on his experience with syphilitic women adequately treated before pregnancy, stated, "It is difficult to understand how most writers recommend that further courses of salvarsan therapy should be carried out through any succeeding pregnancy."

Although all of the preceding quotations are taken from Stokes, "Modern Clinical Syphilology," Third Edition (1944), that author states as his opinion in the same text, "Conservative opinion suggests that with our present-day knowledge, a syphilitic woman should be treated through every pregnancy, regardless of the duration of her infection, her serologic status, or the amount or type of antecedent therapy." Moore (in 1943: "The Modern Treatment of Syphilis," Second Edition) quotes McKelvey and Turner's and the Cooperative Clinical Groups' figures as listed above, and agrees with the former that thorough treatment of the maternal syphilis *prior* to pregnancy, i.e., not less than four gm. of arsphenamine with appropriate heavy metal, probably affords adequate protection of the offspring in subsequent pregnancies even though treatment during the pregnancy is omitted." He further states that, "They feel, however, that if the maternal serologic test remains positive, or if there is clinical evidence of persistent infection, it seems wise to treat the mothers during pregnancy, regardless of the amount of previous treatment." Moore does not comment on this last quotation.

Stokes and Moore are undoubtedly the most referred to authorities on the conduct of the treatment of syphilis, and rightly so because there is certainly no more comprehensive and dependable compendium of information in this field than either of these texts represents. It is to be hoped that future editions will carry the material presented in Dr. Barnett's present paper, giving appropriate weight to his conclusions.

It is only by giving such weight to the findings reported in this excellent paper, and those previously reported, that we who treat syphilis, whether we be "specialists" or general practitioners, will dare to stop subjecting pregnant syphilitic women to unnecessary and dangerous treatment, just as a sop to our own perhaps too zealously guarded peace of mind.

The Incidence of Unsuspected Urinary Tract Infection in a Selected Group of Ambulatory Women

RICHARD H. BARR, M.D., and LOWELL A. RANTZ, M.D., *San Francisco*

A PREVIOUS study conducted in the Stanford University Hospitals demonstrated that unsuspected urinary tract infections were common in females who had been hospitalized for various unrelated disorders. The present report describes the results of a similar investigation among ambulatory females attending the Out-Patient Clinics of Stanford University Hospitals.

It is of interest to note that there are few recorded studies of this nature,[1,4,6] although the sequelae of smouldering untreated urinary tract infections has been discussed at great length in the literature. Particular reference is made to chronic pyelonephritis, which often leads to the development of arterial hypertension or renal failure. Longcope[4] states: "It should be possible to recognize this form of renal disease long before the critical stage of kidney destruction has been reached. By doing so, one might hope through proper treatment to retard its progress or to arrest it altogether." The purpose of this study was to determine the frequency of unsuspected urinary tract infection. No detailed discussion of therapy will be undertaken.

CLINICAL MATERIAL

One hundred and twelve women were selected for this study from the patients in the gynecological outpatient clinic of Stanford University Hospitals. All subjects were from 17 to 43 years of age (Table 1). A past history of possible urinary tract infection was obtained in 20. Eleven were in the first trimester of a pregnancy and ten were approximately six weeks post partum. Additional information as to the primary reason for clinic attendance by these patients is summarized in Table 2.

TABLE 1.—*Age Distribution of Study Group* (Range 17 to 43 years)

Age Group	No. of Patients	Per cent of Total
Below 20 years	4	3.6
20 to 30 years	76	67.8
30 to 40 years	29	25.8
Over 40 years	3	2.6

A complete history was obtained and physical examination done in all cases selected for study. Laboratory investigation included the culture of urine collected by catheter and such other procedures as were indicated.

From the Department of Medicine, Stanford University School of Medicine, San Francisco, California.

The authors are grateful for the assistance of many members of the Gynecological and Medical House Staffs of Stanford University Hospitals.

TABLE 2.—*Reason for Clinic Visit of Patients in Study Group*

Reason for Clinic Visit	Number	Per cent of Total
1. Prenatal cases, 1st trimeter	11	10.0
2. Postpartum (6 weeks) routine examination	10	9.0
3. Contraceptive advice	6	5.4
4. Referred as gonorrhea contact	7	6.6
5. Referred from other clinics for varied complaints including primarily low back pain, abdominal pain, hot flushes, etc.	24	21.3
6. Primary gynecological disease:		
a. Chronic pelvic inflammitis	6	
b. Chronic cervicitis, vaginitis	11	
c. Metrorrhagia, menorrhagia	8	
d. Possible pregnancy	7	
e. Other	21	46.8
7. Diabetes, mild	1	0.8

METHODS

A. *Collection of Urine Specimens.* All specimens were collected aseptically by catheterization in the usual manner, either by the senior author or by the attending nursing staff under his supervision. Specimens were then examined and cultured with minimal delay.

B. *Method of Culture.* The following technique was used: 0.5 cc. of urine was transferred aseptically to 10 cc. of peptic digest broth containing 0.8 cc. of horse blood, and 0.1 cc. of urine to the surface of each of two blood agar plates and one eosin methylene blue agar plate. One blood agar plate was placed in the anaerobic jar. All inoculated media were examined after 24 and 48 hours of incubation at 37° C. The isolated organisms were identified by the usual bacteriological methods. No organisms were recovered in anaerobic preparations that failed to grow aerobically. All urines containing large numbers of bacteria were studied by the usual microscopic and chemical methods.

CLASSIFICATION OF RESULTS

The patient was not thought to have a significant urinary tract infection and no further studies were done if the first urine contained less than 200 colonies of bacteria per cc. This classification was an arbitrary one and was based on past experience.

Another catheterized urine specimen was secured at one, two or three week intervals when more than 200 bacteria per cc. were present on the first examination. If the second specimen was also positive, cystoscopy was done with collection of urine from both ureters. The patients were not investigated further if the second specimen was sterile, since a transient bacilluria of little clinical significance presumably had been discovered.

NEGATIVE CASES

The urine obtained from 104 patients showed minimal growth of bacteria or was sterile. None of these patients had any present complaints referable to the urinary tract. Historical evidence of urinary tract disorder was obtained in 20 (20.1 per cent) of these uninfected individuals. The nature of their past complaints is summarized in Table 3.

TABLE 3.—*Cases with Past History of Possible Urinary Tract Disease*

Case No.	Past history of urinary tract episode
2	Dysuria, frequency, positive urine culture one year ago.
3	Passed calculus with hematuria, burning, pain, 1944; frequency and burning, 1945.
14	"Sore on kidney wall," 1943.
20	Mild burning one month ago.
21	Burning following pessary insertion two weeks prior to visit.
23	Urgency, frequency nine months ago.
24	Urgency, one week ago, slight.
26	Nocturia, slight, two weeks ago.
29	Burning one year ago.
30	Dysuria with pregnancy one year ago.
37	"Cold in bladder," 1937.
64	Possible infection, 1942, with hematuria.
66	Urgency for two days in 1945.
69	Frequency and slight dysuria, 1946.
71	Possible kidney infection, 1937.
84	Recent urgency and nocturia.
92	Possible urgency and frequency in past.
96	Urgency, frequency, 1946.
102	Toxemia of pregnancy, 1937.
110	Dysuria, slight, two months prior to first visit.

Pelvic examination was performed in over 90 per cent of these patients. It was not remarkable in 65 per cent and revealed minor abnormalities in the remaining 35 per cent. For the sake of brevity these are not summarized, but the pelvic findings in the patients whose urine showed large numbers of organisms will be mentioned later.

POSITIVE CASES

Cultures of the first catheterized urine specimen from eight patients revealed the growth of large numbers of organisms. Bacteria and moderate numbers of pus cells were demonstrated in the urinary sediments. Routine tests for sugar and albumin were invariably negative. Two of these individuals had sterile urines on repeated culture and one did not return for subsequent examinations. Five patients remained who were studied thoroughly. Their records are summarized briefly below.

CASE REPORTS

CASE 1.—The patient was a 36-year-old housewife, gravida O, para O. She first visited the gynecological clinic on 17 July 1947 complaining of darting cramps across the midabdomen. The past history was negative. Pelvic examination showed slight cystocele and rectocele. The general physical examination was not remarkable, and the blood pressure was 110 mm. systolic, 60 mm. diastolic. The first and second bladder urine specimens showed a heavy growth of staphylococcus aureus, coagulase negative. Cystoscopy was done and slight inflammation of the trigone of the bladder was discovered. Two thousand colonies per cc. of staphylococcus aureus, coagulase negative, were isolated from urine obtained from the right ureter. Moderate numbers of bacteria and a few pus cells were seen in the centrifuged sediments of urine from the bladder and the right ureter. Intravenous pyelograms revealed fuzziness of the right kidney and pelvis, and inflammatory disease of the right middle calyx, which was compatible with the presence of chronic pyelonephritis. The patient received combisol (0.016 gm. sulfadiazine and 0.017 gm. sulfamerazine) 0.5 gm. four times a day for ten days. At the end of that time the bladder and ureteral cultures were sterile.

CASE 2.—The patient was a 28 year old negro housewife, gravida I, para II. Past hospital history revealed hospitalization on 18 June 1947 for a primipara pregnancy with normal spontaneous delivery and no complications. The patient first visited the gynecological clinic on 31 July 1947 for a routine post-partum examination. There were then no specific complaints. The pelvic and general physical examinations were not remarkable. The blood pressure was 110 mm. systolic, 90 mm. diastolic. The first and second urine specimens showed a heavy growth of paracolon bacilli, highly resistant to streptomycin. Upon cystoscopy within one week, sterile urine was found in both ureters. The urine sediment showed many bacteria, a few epithelial and white blood cells. Intravenous pyelograms showed moderate ptosis of the right kidney and no other abnormalities. The patient was given combisol, 0.5 gm. four times a day for two weeks. Subsequent urine specimens were sterile.

CASE 3.—The patient was a 30-year-old negro woman, gravida II, para II, was examined in the chest clinic on 24 April 1947 on suspicion of active pulmonary tuberculosis. This diagnosis was not confirmed by subsequent study. The patient's first visit to the gynecological clinic was on 2 June 1947, at which time she thought she was pregnant. Examination showed only a third degree uterine retroversion. The second visit was on 4 August 1947, the patient complaining of lower abdominal pain, which was believed to be caused by a subacute pelvic inflammatory disease. This condition resolved within a short period. There was never any complaint of urinary tract disease. The general physical examination showed a blood pressure of 130 mm. systolic and 90 mm. diastolic, and was otherwise without note. The urinary sediment from the bladder and ureters showed many bacteria and a few white blood cells. The first and second bladder urine specimens revealed, upon culture, a heavy growth of Escherichia coli. Cystoscopy disclosed a mild trigonitis and posterior urethritis. Urine from the right ureter contained 60, and that from the left ureter 260, coliform organisms per cc. Intravenous pyelograms showed only slight dilation of the superior calyx of the right kidney. The patient was given 0.5 gm. of streptomycin intramuscularly once daily for five days. Urine specimens taken one week and then one month following this therapy were sterile.

CASE 4.—The patient was a 24-year-old negro, gravida O, para O. Her first visit to the gynecological clinic was on 1 July 1947 on suspicion of gonococcal infection. Subsequent examinations showed she did not have this disease. There were no complaints of urinary tract disease at any time. The first urine specimen showed a heavy growth of staphylococcus albus, coagulase negative; the second, a large number of the same organisms and a few E. coli. Specimens obtained from both ureters were sterile. Moderate numbers of bacteria but no pus cells were seen in the urinary sediment. No abnormalities were noted upon cystoscopy. Intravenous pyelograms were not obtained. The final urine specimen was sterile after combisol had been administered for two weeks.

CASE 5.—The patient, a 37-year-old negro, gravida O, para O, first visited the gynecological clinic on 8 July 1947, complaining of dysmenorrhea and headaches. There were no complaints of urinary tract disease at any time. Pelvic examination showed moderate retroversion of the uterus, and a small cervical polyp was found and removed. The blood pressure was 120 mm. systolic, 85 mm. diastolic. The general physical examination was otherwise not remarkable except for the presence of an apical systolic cardiac murmur.

The first and second catheterized urine specimens showed a heavy growth of staphylococcus albus, coagulase negative. The third specimen, including urine from the bladder and both ureters, showed growth of the same organism, 380 organisms per cc. being recovered from the right ureter and 1,500 from the left. The sediments of urine from both ureters contained moderate numbers of bacteria and a few pus cells. Cystoscopy revealed inflammation of the trigone with encrustations on the bladder mucosa, and a diagnosis of cystitis and trigonitis was made. Intravenous pyelograms were reported to show no calculi or ptosis. Drainage was somewhat inhibited on both sides and a moderate residium of dye remained after evacuation. Combisol was given, 1 gm. three times a day for ten days. Urine specimens at the end of that time were sterile.

DISCUSSION

Unsuspected urinary tract infection was discovered in 4.4 per cent of a group of 112 ambulatory women. This is an incidence only slightly less than that found by post mortem examinations done at the Stanford University Hospitals for the years 1940-1941. Twelve cases of chronic unilateral or bilateral pyelonephritis were discovered in 252 examinations of women who had had no known history of urinary tract infection during life and in whom the cause of death was entirely unrelated to the genito-urinary findings at autopsy.

The large number of patients who had had symptoms of urinary tract disease in the past but who had negative urine cultures at the time of this study, confirms the impression that single symptoms such as nocturia, frequency or dysuria, do not definitely indicate the presence of infection of the urinary passages. These symptoms are highly subjective in nature and can arise from any pelvic or lower abdominal disorder[3] but, when present, should focus attention on the urinary tract and surrounding structures.

That there were five patients in the group whose urine contained infecting organisms shows that a severe urinary tract infection may exist in the absence of specific symptoms. It is interesting and highly significant that in one case there was definite roentgenological evidence of kidney damage, consistent with chronic pyelonephritis. The infections in all these patients had been present for a relatively short time; there was no systemic evidence of renal disease. The blood pressure was always normal, and albuminuria and cylindruria were never discovered. Kidney function tests were omitted as it is doubtful that they would have contributed any important information.

It is obvious that minor and vague urinary and lower abdominal symptoms do not correlate well with the actual presence of infection of the kidneys and bladder. This makes diagnosis of such disorders difficult if not impossible on the basis of clinical findings in the absence of laboratory reports. The fact that the existence of pyelonephritis may be totally unsuspected is even more striking and more significant.[2]

It was again found in this study, as in a former one,[5] that there was no relationship between pelvic disease and the presence of urinary infection. It has been commonly assumed that Bartholin cyst abscesses, endocervicitis, vaginitis, and cervical polyps are frequently associated with cystitis, trigonitis or urethritis, but the experience described in this presentation suggests that this is often not the case. There were 15 examples of such pelvic disorders in the absence of concomitant urinary tract disease.

Physicians are becoming increasingly cognizant of the importance of disease of the urinary tract as a cause of disability and of irreversible renal disorders of later life. Infection of these organs has been greatly neglected in the past. It has been stated that chronic pyelonephritis is second only to chronic glomerulonephritis as a cause of serious kidney disease.[4] It is not necessary to emphasize the difference in prognosis and in weapons available for treatment in the two diseases.

It is strongly urged that bacteriological examinations of the urine should be performed more frequently, not only by gynecologists but by all other physicians. Although it is preferable to secure urine specimens by catheter, experience has shown that voided specimens also can be used. Accurate and significant results may be obtained if proper precautions are taken. The patient should void into a sterile, wide-mouthed bottle which is transmitted to the laboratory without delay. Culturing techniques which yield roughly quantitative results must be used. Before instituting further measures, a second urine culture should always be obtained where the first is found to be positive.

More detailed study of the urinary tract should be undertaken in patients whose symptoms and signs indicate the presence of chronic infection or an intra-abdominal disorder not otherwise explained. Individuals in whom there is a definite past history of urinary tract infection, or in whom anatomical abnormalities of the urinary passages are known to be present, also require frequent bacteriological examination of the urine. Persons in whom infections are discovered should be carefully followed for long periods of time after adequate treatment has been completed because recurrence of disease is a frequent event in such cases.

A bacteriological examination of the urine might well be a part of preemployment and insurance examinations and be undertaken on the initial study of individuals participating in group medical care programs. Progress in the prevention of chronic infections of the urinary tract and their serious sequelae will be attained only by repeated and careful study of the urine of large numbers of apparently healthy human beings.

CONCLUSIONS

1. Unsuspected urinary tract infections were discovered in 4.4 per cent of a selected group of relatively healthy young women attending the Out-Patient Clinic of Stanford University Hospital.

2. The cases of five patients with definite infection, including three with chronic active pyelonephritis, are presented in detail and the response to treatment is outlined.

3. The sequelae of infections of the urinary tract are discussed and a plea is made for more frequent and detailed study of the urine by clinicians.

REFERENCES

1. Elliott, W.: Demonstrable genito-urinary disease in presence of normal urinary findings, Minn. Jour. Med., 24: 546 (July), 1941.

2. French, P. K.: Importance of urologic examination in cases of chronic obscure ailments, Urol. & Cutan. Rev., 48:214 (May), 1944.

3. Lintgen, C.: Significance of urinary symptoms in women, Urol. & Cutan. Rev., 46:279 (May), 1942.

4. Longcope, W. T.: Chronic bilateral pyelonephritis. Its origin and association with hypertension, Ann. Int. Med., 11:149 (July), 1937.

5. Marple, C.: Frequency and character of urinary tract infections in an unselected group of women, Ann. Int. Med., 14:2220 (June), 1941.

6. Munger, A. D.: Newer concepts in diagnosis and treatment of urinary tract infections, Jour. Iowa Med. Soc., 32:112 (March), 1942.

7. Weiss, S., and Parker, F., Jr.: Pyelonephritis: Its relation to vascular lesions and to arterial hypertension, Medicine, 18:221 (Sept.), 1939.

Treatment of Urinary Tract Infections

SIDNEY OLSEN, M.D., *San Francisco*

IN the treatment of urinary tract infections, the urologist, when this is feasible, should assume the management and responsibility for proper care. He is equipped both with experience and facilities to do so. With the advent of the sulfonamides and antibiotics, and their universal use, fundamental facts are lost sight of and unnecessary complications ensue. Enumeration of these facts may seem elementary but their application will save much time and misery for the patient.

ETIOLOGY

These infections are the result of invasion of the urinary tract by organisms causing various inflammatory changes. There are only a few kinds of such organisms, and they are classified as (1) pyogenic (coccus and bacillus), and (2) non-pyogenic or specific (gonococcus and tubercle bacillus). The infection may be a mixed one. This discussion is limited to the pyogenic form. Because of the predilection of each form for different parts of the tract, this differentiation is essential to successful treatment.

DIAGNOSIS

Uncomplicated acute urinary tract infection usually is self-limited and clinically disappears in two to four weeks. Acute appendicitis, cholecystitis, and salpingitis may simulate it, and early establishment of the correct diagnosis then may be life-saving. The subacute and chronic forms are easily diagnosed but the damage may have been done. The focal renal infections, such as infected infarcts, multiple abscess, or carbuncle may go undiagnosed or extend to the perirenal area and require surgical operation for relief. Such infections are usually coccal in origin. Thus, fundamentals are of value. These include taking a careful history, general examination, examination of the genitalia, microscopic examination of the urine for pus and for organisms with or without pus (cocci or bacilli) or pus with tubercle bacilli, examination of the prostate and seminal vesicles, roentgenographic examination of the whole tract including the prostate, and, last but very important, determination of kidney function.

Naturally, these are not done in a patient with pyuria due to a urethral discharge alone, but unless the genitalia are examined before the patient voids, the discharge may not be seen.

In treating patients with acute infection or those with recurrence or chronic infection, this data will prove valuable and its recording will gain the confidence of the patient. The general practitioner can make the examinations but may require assistance in interpretation and advice as to instrumentation.

Collection of Urine: This must be properly done. In the female, the specimen should be taken by catheter after thorough cleansing of the external

From the Department of Urology, University of California Medical School.

Read before the Section on General Practice at the 76th Annual Session of the California Medical Association in Los Angeles, April 30-May 3, 1947.

genitalia. In the male, a catheter is not necessary when the patient can void, but the genitalia should be thoroughly cleansed. In each case any discharge of pus or blood should be stained and examined microscopically. This alone may lead to the diagnosis. The next step in the male is to have him void in a steady stream and catch some of the urine in two or three glasses, the second of which should be sterile. This is a true bladder specimen and will suffice for cultural and microscopical studies.

Examination of the urine should include a Gram-stain or a simple methylene blue smear. Cocci or bacilli or both may be noted and proper treatment instituted while a report on culture growth is awaited. Tubercle bacilli should be looked for.

It is very important to make blood cultures in cases of acute infection. These are commonly positive but not necessarily ominous. Fortunately, the bacillus is the most common invader as well as the least serious, as the infection then usually involves only the drainage system of the tract, while the coccus is apt to involve the deeper structures of the kidney such as the parenchyma only, and thus its presence may present no signs or symptoms in the urine. Negative findings in the urine in such cases may hinder early diagnosis, so that surgical operation becomes necessary to save life. In a generalized septicemia, both kidneys become involved.

Blood chemical determinations also are advisable at times.

Predisposing factors to infection are mainly stasis and obstruction. These lead to recurrences, chronicity, and more or less damage. Again, the urologist enters with his equipment, to determine whether complications exist, as a successful treatment presupposes their eradication.

At times, infection with obstruction requires immediate instrumentation. This is justified and advisable, provided drainage is also secured. The obstruction can thus be localized and the extent of damage both by infection and back pressure determined.

Intravenous urograms are useful, but are not advisable in the presence of high fever. Too much reliance should not be placed on their interpretation. They are of value mainly to determine the presence or absence of anomalies, hydronephrosis, or obstruction. In the subacute, chronic, and recurring infections, thorough instrumental examination must be made, including relative functional tests and bilateral pyelo-ureterograms.

TREATMENT

Consideration of treatment calls to mind certain fundamental questions: (1) Is the infection acute or chronic or recurrent? (2) Is the invader coccal, bacillary, or specific? (3) Is a complication present (stone, obstruction, or anomaly), or the tract normal? (4) Is it an upper, lower, or combined tract involvement and is it unilateral or bilateral? (5) Is there loss of renal function? These questions the urologist can answer.

Some simple cases of pyuria with only local bladder symptoms respond readily to prostatic massage and urethro-vesical irrigations with or without chemotherapy. Again, in females, simple bladder lavage through a catheter may suffice. Acute and toxic infections demand early treatment for symptomatic relief and the prevention of complications.

Drugs alone seldom cure. They are mainly prophylactive and palliative. Undoubtedly, with our present-day knowledge of their uses and actions, much less urinary tract diseases will develop. However, indiscriminate use of them is to be condemned as the patient may be rendered symptom-free, with the clearing of local infection, although the underlying disease persists and may progress. Only a few medicines are good. To use them empirically is unadvisable. Too often the subsidence of sypmtoms is interpreted as a cure. In many cases, bacteriuria is symptomless but chronic. With a recurrence, the patient may drift or seek drug-store advice, and much early time is lost in making an accurate diagnosis.

Water is still a medicine of choice. The drinking of three to four liters daily is usually advisable. Preliminary studies should have ascertained if this amount is safe.

Diets are difficult to administer as well as to tolerate.

DRUGS

The drugs useful in treatment are acidifiers, sulfonamides, arsenicals, and antibiotic. The dyes probably have some psychic effect. Methylene blue, .065 gm. two to three time daily, does decrease bladder discomfort. Alkalies and bladder sedatives are palliative, as are copious fluids. Mandelic acid is a valuable acidifier; in divided doses (8 to 10 gm. daily), it will cause the pH to reach 5.5 where it may be bacteriostatic. The disadvantages are that the urine must be concentrated, which means a low fluid intake. Furthermore, impaired kidney function contraindicates its use. It may be of value against Gram-negative bacilli or streptococcus fecalis.

Sulfonamides: The results with these are very satisfactory. The author feels they are the drugs of choice if tolerated, and if the patient can be observed. Small doses of 1 to 2 gm. daily, and at times even less, are just as efficacious as around-the-clock medication, and the likelihood of intolerance is less. They can be used where renal function is impaired. With the small amounts advocated, blood level studies are not necessary. As these drugs are eliminated almost entirely by the kidneys, it is not necessary to concentrate the urine, and fluids can be forced. Mild signs of toxic reaction such as headache, dizziness, or weakness, which are common, should not be a reason for discontinuance. Careful clinical observation will usually give sufficient and ample warning. There is one reaction from sulfonamides which is common and often deceptive. This is the persistence of fever or spiking temperatures even with such small amounts as 0.5 gm. a day. When fever is due to the drug, it is out of proportion to clinical findings (such as pain, tenderness, masses)

or urinary findings. If the drug is the cause of fever, stopping it reduces the temperature in 24 to 36 hours.

The author believes sulfathiazole is as good as any of the sulfonamides. It has less tendency to crystal formation in the urine than sulfadiazine, although this tendency in sulfadiazine in 0.5 to 2 gm. doses daily with copious fluids and with sodium bicarbonate, if desirable, does not present too great a complication. If neither sulfathiazole nor sulfadiazine is tolerated, switching to others of the group is indicated, not forgetting sulfanilamide, again in amounts of 0.3 to 1 gm. daily. Pyuria may persist despite the giving of sulfa drugs, however, which may mean that the organisms are resistant or that a secondary infection, possibly one that has been kept in check by the more virulent organism, has arisen. Sulfonamides seem to be most effective against most Gram-negative organisms and some Gram-positive cocci, but are not effective against streptococcus fecalis.

Arsenicals: One overlooked agent is neoarsphenamine. In pyuria caused by cocci, such as staphylococci, or in a bacterial pyuria, it may be specific. Such low-grade pyurias caused by kidney infection usually clear up with three injections of 0.6 gm. given at five-day intervals.

Penicillin is less effective than the sulfa compounds in the usual run of urinary tract infections. Because of its rapid elimination, the body must be kept saturated either by around-the-clock injections or by single large doses. However, for coccal infections, or where the process has involved the kidney parenchyma, as in multiple abscess or carbuncle, or for infections in the perirenal area, penicillin is definitely indicated. Its good effects in some bacillary infections may be due to the atypical sensitivity of the organisms. Where the possibility of a secondary invader exists or an inhibited organism flares up, the good results from penicillin when the sulfa drugs have failed warrant its use either with the sulfonamides or later. Penicillin and a sulfa drug are advisable as a prophylaxis following catheterization or cystoscopy or surgical operation to prevent unfortunate and prolonged sequellae.

Streptomycin is not a cure-all but is often effective where all other drugs fail. However, besides its high cost and the small supply, there are other objections to use of the drug. Its use is inadvisable if kidney function is impaired, as 80 per cent of it is excreted through the kidneys if it is injected perenterally; it reaches a high degree of concentration in the urine in less than eight hours. It is of no value where stasis exists. Organisms killed by it in vitro are not necessarily affected in the body. Tolerance is often built up so that large divided doses must be used at the outset, at least 3 gm. daily. If taken orally, 90 per cent of the drug is not absorbed.

SURGICAL TREATMENT

Treatment by medication is not always successful. Ten to 30 per cent of patients have recurrences, and major surgical operation is necessary in probably about 30 per cent. With stones complicating, fully 50 per cent require nephrectomy. About 25 per cent of patients with simple pyelonephritis have a recurrence of the disease, with the opposite kidney affected in some cases. There is permanent kidney damage, as shown by functional tests, in about 30 per cent of patients who have had simple pyelonephritis.

CONCLUSION

The urogolist should manage the treatment of urinary tract infections. He can make an accurate diagnosis, outline the treatment, medical or surgical, and handle complications.

Complications are factors predisposing to chronicity and recurrences.

The organism causing the infection should be identified. A predilection for different parts of the tract may be demonstrated.

Only a few drugs are of value. The sulfonamides are the drugs of choice. Penicillin and streptomycin are good adjuncts but have limitations.

384 Post Street.

Medical Treatment of Urinary Tract Infection

CHARLES A. NOBLE, JR., M.D., *San Francisco*

INFECTIONS of the urinary tract can be and should be treated by the physician in general practice or by the internist so long as there are no complications. It is only when such complications exist or arise that the cooperation of the urologist must be sought. This communication is to outline some of the principles of medical regimens and their limitations, as regards infections of the bladder, ureters and kidneys, excluding venereal disease and tuberculosis.

Careful diagnosis is the first prerequisite of good treatment. Pyuria in the male can be due to urethritis and prostatitis. Therefore, the patient should void into two containers, the urine of the second voiding being examined microscopically. Pus or bacteria in this specimen usually comes from the bladder, ureters or kidneys. Pyuria in the female in a voided specimen obviously may be due to genital contamination. The urine should be obtained as a "tube specimen" after careful cleansing of the vulva and the urethral meatus, or the patient should be catheterized.

Prior to the advent, about 15 years ago, of effective and specific chemotherapeutic agents, accurate bacteriological diagnosis was not as important as it is today. At present, to treat a patient with pyelonephritis with, say, a sulfonamide without knowing the organism involved is just as poor practice as is treating a patient with pneumonia without seeking the responsible organism. Such practice may deprive the patient of his only chance to have a correct dianosis made and to be given the best known means of treatment. Moreover, many patients have mixed infections, making accurate bacteriological diagnosis more than ever necessary.

A smear of centrifuged fresh urine stained with Gram solution always should be made, and in many cases a culture taken too. In the male a second voiding is adequate for smear, and even for culture provided the head of the penis and prepuce have been previously cleansed, and provided also the container is sterile. In the female a tube specimen may be used for smear, but urine for culture must be obtained by catheterization.

Acute pyelitis and pyelonephritis (the former probably does not exist without the latter) is an acute febrile illness often with considerable toxicity. In treatment the need for adequate fluids is paramount, and where the oral route is not possible because of vomiting, intravenous infusions are important. A word of caution is not out of place here, for one occasionally sees disregard for the speed of injection, and sees saline given to the point of anasarca. Provided two to three hours is taken per litre of fluid, and not more than two litres of fluid contain saline as well as dextrose, even older debilitated individuals can tolerate such treatment without developing heart failure or edema. Rarely is more than four litres per day necessary or wise.

In addition to fluids these patients are in need of rest and warmth. Their kidney pelves and surrounding parenchymae are edematous and inflamed. The possibility of further irritation of these tissues must be considered when nephrotoxic drugs are administered. Merely alkalinization with potassium citrate or sodium bicarbonate may be wiser for the first few days.

When the acute infection is limited to the bladder there is less danger of further tissue irritation by too early administration of chemotherapeutic agents. Fluids are, of course, important here also. Further added comfort can be given the patient by hot Sitz baths, and, in women, by hot vaginal douches. Symptoms of strangury sometimes respond to alkalinization or to hyoscyamus or to belladonna.

In chronic pyelonephritis and in chronic cystitis many of the same therapeutic principles apply. It is important here to realize that the reason for the chronicity is usually a mechanical difficulty. Some of these mechanical factors will be mentioned later. Treatment of them, of course, falls within the realm of the urological specialist.

The possibility of urinary tract tuberculosis always must be kept in mind when the cause is not apparent. Moreover, tuberculosis can co-exist with other bacterial infections. The diagnosis is made by finding the organism in catheterized urine specimens, or better by culture or by guinea pig inoculation. Except for possible palliation with streptomycin, the treatment is surgical.

The rare fungus and protozoan infections are beyond the scope of this presentation.

SULFONAMIDES

Sulfonamide preparations are discussed first, not because they are the drugs of choice, but because they are used so universally and so rashly not only for urinary tract infections but elsewhere, some of the dangers should be re-emphasized. Fatalities from tubular obstruction are well known, but deaths also have occurred from renal damage and anuria even in the absence of crystalline deposits. Bone marrow depression and death after as many as five weeks with as small a dose as 1 gm. a day have been reported. Followers of Arnold Rich worry about generalized blood vessel sensitization. Such speculation merely enhances the need for caution in the use of a valuable therapeutic agent, and makes it necessary to weigh the possible benefits against the in-

From the Division of Medicine, University of California.

Read before the sections on General Practice, General Medicine and Urology at the 76th Annual Session of the California Medical Association in Los Angeles, April 30-May 3, 1947.

herent dangers. If another drug offers equal therapeutic promise, that drug should be preferred to sulfonamide. Moreover, sulfonamide should not be administered in the presence of an elevated blood urea. It should not be administered unless the patient is warned to report decrease in urinary output. Blood counts (white cell count and hemoglobin are adequate) as well as urine examination must be done twice a week for at least the first two weeks, and once a week for six weeks during treatment with small doses, more often still with large doses.

Of the sulfonamides, sulfadiazine and perhaps sulfacetimide are probably best. More recently a combination of sulfathiazole and sulfadiazine has shown promise. In severe infections 1 gm. every four hours day and night is usually adequate, in the less severe 0.5 to 1 gm. four times daily. Fluid intake to secure 1000 to 1500 cc. output of urine daily is essential. Added sodium bicarbonate sufficient to alkalinize the urine is desirable. Sulfonamides are useful against bacillus coli, aerobacter aerogenes, staphylococcus and streptococcus. They have no effect against streptococcus fecalis, and rarely against bacillus proteus or pyocyaneus.

PENICILLIN

As the majority of urinary tract infections are caused by Gram-negative bacilli, penicillin has a very limited field of usefulness. It is specific for certain strains of streptococcus fecalis. It has some value with occasional proteus infections. Dosage of 40,000 to 200,000 units daily parenterally is usually adequate. Allergic reactions to penicillin are being reported in increasing number.

STREPTOMYCIN

Streptomycin, the youngest of the chemotherapeutic family, has proven effective against over 80 percent of the Gram-negative, and also many of the Gram-positive organisms found in the urinary tract. It is of particular value against proteus vulgaris and aerobacter aerogenes, but it is effective against most bacillus coli, some pyocyaneus, and many staphylococci. In many patients sterilization of the urine takes place, but in others a clinical remission is induced without sterilization of the urine. Especially when obstruction is present is permanent sterilization of the urine rare. Furthermore, temporary benefit has been obtained in some patients with tuberculosis. It must be stated, however, that the very promising results of the in vitro experiments have not always been attained in the human subject.

Unlike penicillin, streptomycin is excreted slowly and 40 to 60 percent appears in the urine in 24 hours, against 60 percent in one hour for penicillin. Streptomycin excretion continues for 48 hours after administration ceases. The dosage must usually be high, 2 to 4 gm. per day, administered intravenously or intramuscularly, at 3 to 6 hour intervals. However, recent work has shown some more sensitive organisms, e.g. certain E. coli, to respond well to 1 gm. per day. In vitro strain sensitivity should be tested if possible. The use of sodium bicarbonate or potassium citrate by mouth in conjunction with streptomycin may increase its effectiveness. The drug does not impair renal function.

The disadvantages of streptomycin are the excessive cost, the necessity for injections, and the unpleasant side reactions such as local irritation at the site of injection, headache, vertigo and deafness, and sensitization, with fever and rash. With 3 gm. a day such reactions have been reported to occur in 46 percent and with 4 gm. per day in 60 percent of patients. With the newer, more purified preparations these figures may have to be revised. Anemia and neutropenia plus purpura have been reported. Finally, many organisms very rapidly build up streptomycin resistance. To obviate this, maximum injections must be given from the start. This whole subject is still in its infancy, and many changes may arise in the present conception of the indications and contraindications for the use of streptomycin.

MANDELIC ACID

Mandelic acid is a drug effective in the treatment of many urinary tract infections. While the results are not as dramatic as with some of the newer agents, it is also less toxic and has been unnecessarily neglected. However, it acts only if the urine has been rendered acid at least to pH 5.5 by the addition of ammonium chloride, usually 5 to 8 gm. a day of the enteric coated tablets. The urinary acidity should be tested repeatedly by nitrazene paper. Calcium, sodium or ammonium mandelate in 10 to 14 gm. doses per day after meals is usually adequate, and with the ammonium salt less added acidification may prove necessary. Mandelic acid acts only through its effect on the urine, so that fluids must be limited to 1000 to 1500 cc. which makes it unwise for a patient with a high fever. It is also contraindicated in the presence of elevated blood urea, and it is not tolerated well by old people. Nausea can often be prevented by administration after meals. It is a bacteriocidal against most Gram-negative organisms such as E. coli, aerobacter aerogenes and against some B. pyocyaneus, although the latter bacillus, being a urea splitter, makes the urine hard to acidify. Mandelic acid is also effective against staphylococci, hemolytic streptococci, nonhemolytic streptococci, and against streptococcus fecalis.

METHANAMINE

Methanamine, the oldest of the antiseptics in common usage, still has a field of usefulness. In dosage of 0.6 gm. 3 to 4 times a day in combination with sodium acid phosphate or preferably with ammonium chloride sufficient to acidify the urine to pH 5.5, it will sterilize many B. coli infections, and it is milder and produces less toxic effects. It lends itself particularly to the treatment of low-grade chronic infections, especially in the aged. However, hematuria must be watched for.

PYRIDIUM

Pyridium, one representative of the azo dye group, is not a potent bacteriocidal agent. It has value in

some chronic low-grade infections, especially where acidification is difficult. It seems effective both in alkaline and acid urines.

ARSPHENAMINE

Arsphenamine has been found effective against certain rare cases of abacterial pyuria where tuberculosis has been excluded.

The medical treatment of urinary tract infections, as herein outlined, can be curative. It is important to remember, however, that infection is often present because of stasis or obstruction. There may be obstruction due to stricture, to prostatic hypertrophy, to cystocele, to tumor, or to calculus as well as to many other factors. Permanent sterilization of the urinary tract is difficult in the face of these obstacles. Of greater importance, the overlooking of the other factor may have serious effects for the patient. Obstruction may lead to chronic hydronephrosis, to renal failure, to hypertension, and to death.

No patient whose urine does not promptly become sterile and remain so for several weeks after therapy should be discharged. Every patient with acute pyelonephritis whose urine does not become sterile within one to two weeks under active treatment should have further investigation, including at least intravenous pyelography. Three to four weeks' treatment of the patient with chronic disease should be similarly considered an adequate test of the effectiveness. Suggestion of obstruction should indicate the assistance of a urologist. During the early stages of acute illness, instrumentation and even pyelography are unwise, but the patient who is not responding to conservative measures must be subjected to further study.

SUMMARY

Treatment of pyelonephritis or cystitis should be by the general practitioner or internist.

Effective therapy requires bacteriological diagnosis by smear or culture.

In treatment of acute infections parenteral fluids are often given too fast and without regard for content of salt.

Antibiotics include streptomycin, penicillin, sulfonamides, mandelic acid, methanamine, pyridium, neoarsphenamine.

Sulfonamides, even in small doses, may produce grave reactions, and patients require constant laboratory and clinical supervision. When equally effective, other agents should be preferred to sulfonamides.

If disease is refractive to treatment, and urine does not become and stay sterile, search for obstruction must be made with the aid of the urologist.

384 Post Street.

Torsion of the Testicle

LLOYD KINDALL, M.D., and THOMAS T. NICKELS, M.D., *Oakland*

CONSIDERABLE interest in torsion of the testicle has been shown in the urological literature in the past three to five years, with many new cases being reported. All authors feel that numerous cases of torsion diagnosed at operation are never reported and that many remain undiagnosed. Early recognition of the condition is extremely important because of the serious sequelae which may ensue within eight to twelve hours.

This entity has been reported at birth, and as late as the 68th year of life, with the vast majority falling in the second decade of life. Incidence is approximately equal on either side.

PREDISPOSING AND EXCITING FACTORS

Most writers agree that torsion does not occur in a normal testis. The occurrence of torsion outside the tunica vaginalis is not accepted by many authorities. In any event torsion which occurs within the tunica vaginalis is predominant.

Many anomalies predisposing to torsion have been enumerated: Hypermobility of the testis, loose connections between testis and epididymus and between the scrotal contents and the tunica vaginalis, abnormal attachments of the cord to the testis, voluminous scrotum, absence or faulty development of the gubernaculum, blood supply entering the upper pole instead of body of the testis, and, of most importance, a voluminous tunica vaginalis with a high insertion on the cord with cremasteric fibers within the tunica. The exciting cause may be a "strain" or sudden effort but the torsion may occur in sleep where the initiating factor most probably is an aberrant contraction of the cremasteric muscle. At present less than half the reported cases are in patients with undescended testes.

PATHOLOGY

The pathological changes are those of varying degrees of avascularity with the end stage being a congestive infarct, finally resulting in necrosis leading to atrophy. Rotation of the torsion usually takes place from without inward, varying from 90 to 360 degrees.

SUBJECTIVE AND OBJECTIVE FINDINGS

Symptomatically there is sudden severe pain in the testis following a "strain" or sudden exertion, with subsequent swelling appearing rapidly. Nausea, vomiting, acceleration of the pulse, and slight elevation of the temperature have been noted. There may be some elevation of the leukocyte count. A history of recurrent pain and swelling of the testicle may be obtained.

Read before the section on Urology at the 76th Annual Session of the California Medical Association in Los Angeles, April 30-May 3, 1947.

Physical examination reveals an enlarged, markedly tender, retracted gonad. Elevation of the affected gonad always aggravates the pain, whereas the pain of acute epididymitis tends to be lessened by elevation. Dillon's sign of early edema and fixation of the scrotal contents to the adjacent coverings may be present. Before scrotal edema has developed the epididymus may be felt in an abnormal relationship to the testis. In advanced stages of the disease the testes are atrophic and asymptomatic.

CASE REPORT

Recently a 17 year old male was admitted to the hospital with a history of being awakened with fairly severe left testicular pain which lasted seven hours. Three weeks prior to entry he had been awakened by sharp pain in the left testicle which subsided in a few minutes. Three days later, while the patient was playing football, the pain recurred but again subsided in a few minutes. Examination revealed a slightly enlarged, non-retracted, tender left testis and epididymus with a normal relationship of the structures. The temperature was 99.6F and the pulse rate 88. Urine and prostatic fluid were normal. The leukocyte count was 13,400 with a slight increase of the polymorphonuclear neutrophiles. The blood sedimentation rate was normal.

The decision for surgical exploration was finally based upon a normal sedimentation time, and an intravaginal torsion was found at operation.

A normal sedimentation rate in the presence of a normal or near normal leukocyte count may be very helpful in the differentiation of early torsion from acute epididymitis. There is early acceleration of the sedimentation time in acute epididymitis, whereas the rate is normal in the early stage of torsion.

DIFFERENTIAL DIAGNOSIS

Acute epididymitis may closely simulate acute torsion, but in the former, findings of infection, urethral discharge, pyuria, prostato-vesiculitis or recent neisserian infection are present. More tenderness of the inguinal cord is present in acute vasitis and funiculitis than is usually found with torsion. Symptomatically an acute strangulated hernia may closely simulate torsion, but gastro-intestinal symptoms in the latter are less severe. Absence of the testis within the scrotum on the affected side should lead to suspecting torsion of an undescended testicle. However, immediate surgical exploration is indicated in either case. Torsion of the vestigial appendages of the testis usually runs a milder course, with differentiation very difficult. Since immediate operation is indicated in any event, differentiation here becomes a matter of academic interest. Acute orchitis of mumps is almost always associated with primary parotitis, with pain usually much milder and the cord not involved. Tumor of the testis is usually a

slow growing asymptomatic testicular enlargement. Genital tract tuberculosis will reveal a thickened and beaded epididymus or vas. With an intra-abdominal testis, lesions caused by acute appendicitis, acute diverticulitis, ureteral calculus or acute seminal vesiculitis must be considered. Here the correct diagnosis will be aided by the history, physical findings, urinary findings and roentgenograms.

DIAGNOSIS

Torsion should be suspected from a history of sudden onset of pain in the testis with findings of an acutely swollen and exquisitely tender retracted gonad. Negative urinary findings and a normal blood sedimentation rate, as well as positive Prehn's and Dillon's signs where present, are helpful.

TREATMENT

The treatment of acute torsion of the spermatic cord is by immediate surgical operation. Attempts at manual detorsion are unsafe and outmoded, as the torsion may not be completely reduced thereby. Following surgical detorsion, fixation of the testicle should be performed to prevent recurrence. Orchidectomy is indicated with the demonstration of a nonviable gonad. Recent investigators have advocated fixation of the opposing testicle as a prophylactic measure. Surgical intervention should usually take place within eight hours for successful detorsion with a subsequent viable gonad.

SUMMARY

1. Torsion of the testicle must be suspected in any acute sudden testicular pain.

2. Immediate surgical intervention with detorsion and fixation must be accomplished early to prevent testicular atrophy and recurrence.

3. In all cases of doubt immediate surgical exploration is indicated to reduce the incidence of nonviable testes as a sequel.

4. Blood sedimentation rate differences are a possible aid in differentiating acute torsion of the testicle from epididymitis.

400 29th Street.

Discussion by CLARK M. JOHNSON, M.D.

Dr. Kindall has very briefly presented the clinical picture of torsion of the testicle. He has stressed the fact that early differential diagnosis is usually difficult and he has mentioned the conditions which must be differentiated. In addition, he has contributed the suggestion that the blood sedimentation rate may be of great value in differentiating early torsion of the spermatic cord from inflammatory lesions. I think that this is an excellent idea because most lesions of the testis and epididymis are inflammatory and, therefore, are of the greatest concern in differential diagnosis. Furthermore, most lesions which may simulate torsion of the testis and are not due to inflammation are lesions requiring surgical operation, or at least are lesions which do not contraindicate operation. Epididymitis in the pre-adolescent youth is more common than we have been led to believe and is not necessarily accompanied by other signs of inflammation of the genito-urinary tract. In these cases particularly, I believe, the sedimentation rate will be extremely valuable in differential diagnosis.

I agree with all that Dr. Kindall has to say about treatment, including the suggestion that it may be wise to fix the opposite testicle as a prophylactic measure. I would like to modify his indications for orchidectomy. I believe that in cases seen too late to offer hope of cure by detorsion surgically the patient should not be operated upon at all. We have no way of telling by palpation or exploration just how much viable tissue may eventually survive, and we know from experience with patients who have suffered gross traumatic lesions to both testes or who have had bilateral orchitis due to mumps, that apparently it takes very little testicular tissue to carry on at least some of the most important functions of the gonad. Orchidectomy should be done only in those cases in which there is obvious gangrene.

CASE REPORTS

◀ Splenectomy in a Case of Disseminated Lupus Erythematosus with Thrombocytopenic Purpura
◀ Valve Deformity During Healing of Subacute Bacterial Endocarditis ◀ Hiatus Hernia: Coincident Hematemesis

Splenectomy in a Case of Disseminated Lupus Erythematosus With Thrombocytopenic Purpura

J. H. Brady, M.D., and
W. S. Neal, M.D., *Visalia*

A REVIEW of the literature on lupus erythematosus, in both its disseminated and chronic discoid forms, reveals an almost complete absence of mention of the associated occurrence of thrombocytopenia. It is, of course, possible that the relationship is not as direct as it seemed clinically in the case to be described. It has been suggested by some authors that cases of this category may well be classified under the newer nomenclature of splenic pancytopenia or splenic neutropenia, but in the case to be described the blood picture did not seem to comport with the usual findings in either of these conditions.

Keil[3] of New York recognized this relationship of thrombocytopenia to lupus erythematosus in 1937, but placed emphasis on the part apparently played by gold compounds in causing the hemorrhagic manifestations and purpura in some cases of lupus erythematosus. Templeton[5] merely presented three cases observed by him in which the patients showed disseminated lupus erythematosus associated with thrombocytopenia.

Since there has been considerable controversy as to terminology and as to the real relationship of these conditions, both conditions found in this clinical study have been included in the title of this discussion.

CASE REPORT

The patient, a 30-year-old white female at the time of examination in January, 1946, had been seen at this clinic several times previously; she had had some moles removed from her face in October, 1941, and a normal delivery of a male infant in June, 1942. She was not seen in this clinic again until the present illness. There had been no previous evidence of lupus erythematosus, although a urinalysis on November 18, 1941, showed 1-plus albumin and a very few red blood cells and pus cells. A Kline test of the blood gave a negative result.

The chief complaint during the present illness was weakness, a generally "run-down" condition, and skin lesions of the face, all of which had been gradually coming on for several months.

Examination revealed the patient to be rather thin, not appearing acutely ill and with no unusual findings except a typical butterfly-shaped lesion of the face with dryness and fine scales. There were also the findings of a severe cystocele, rectocele, and endocervicitis which had followed the birth of her last child in June, 1942.

On February 21, 1946, urinalysis revealed 2-plus albumin, no sugar, specific gravity of 1.012, and a few red blood and pus cells. A Kline test of the blood was negative. Erythrocytes numbered 3,830,000, with hemoglobin 68 per cent, and leukocytes 4,050 with 78 per cent polymorphonuclear, 2 per cent lymphocytes and 1 per cent transitional forms. At this time it was decided definitely that the patient had disseminated lupus erythematosus, including hemorrhagic glomerulonephritis. Treatment was instituted, using large doses of vitamins, iron, liver extract, and finally three doses of gold sodium thiosulphate, intravenously at weekly intervals. No response was observed, and the patient was referred to a dermatologist for further treatment.

Apparently some improvement occurred in the lupus since the patient did not return with similar complaints until September, 1946. She said that in the interim she had had a vaginal repair performed by another physician but had had no treatment for her lupus erythematosus which was again evidenced by the usual facial lesions, and a return of the full-blown nephritis syndrome. The urinalysis revealed 4-plus albumin, no sugar, many granular and cellular casts, 1 or 2 red blood cells and 18 to 20 pus cells per high dry field, and a quantitative albumin of 269 mg. per 100 cc. of urine.

Intravenous pyelograms were made at this time and revealed essentially normally functioning kidneys. At this time there was an acute exacerbation of lupus with fever, chills, rapid loss of 25 pounds of weight, to 121 pounds, and pain in both kidney regions. The blood pressure was 86 mm. systolic and 50 mm. diastolic. Treatment was the same as that previously used, plus Vitamin K. The urine continued to contain 3 to 4 plus albumin, hyaline and granular casts, red blood cells, and a few pus cells during September and October. Late in October an episode of generalized purpura occurred.

On November 1, 1946, the laboratory findings were as follows: Hemoglobin 61 per cent, erythrocytes 3,570,000, leukocytes 5,200, polymorphonuclear cells 68 per cent, lymphocytes 30 per cent, eosinophiles 1 per cent, and transitional forms 1 per cent. Urinalysis showed a trace of albumin and 1 to 2 red blood cells per field. Bleeding time was prolonged to 45 minutes, coagulation time was 6 minutes, and the thrombocyte count 7,140. The purpura continued to become worse and on November 13, 1946, there was a severe exacerbation of symptoms, plus gross hemorrhage from the bowel, as evidenced by black, tarry stools; also vaginal bleeding and severe bleeding from multiple large bullous lesions of the tongue, nasal, and oral mucous membranes. The patient was hospitalized and given a citrated whole blood transfusion on November 16, and another three days later, but her course was steadily downward, so that as a last desperate measure splenectomy was performed November 19 under spinal anesthesia. Continuous transfusion was given during the operation. The spleen was found to be 50 per cent larger than normal. No accessory spleens were seen and subsequent pathological examination of the spleen revealed no significant findings. Gradual improvement followed the operation. An additional transfusion was given November 22. Laboratory findings on November 23, 1946, showed hemoglobin 51 percent, erythrocytes 3,230,000, with nucleated red blood cells present. Urinalysis showed no sugar and no albumin, but 16 to 20 red blood cells and 6 to 10 pus cells per field. On November 30, urinalysis showed 2-plus albumin, and the urine was grossly bloody. Hemoglobin was 35 per cent, and erythrocytes numbered 2,300,000, but the bleeding time was

now 1½ minutes, coagulation time was 4½ minutes, and the platelet count 23,000. Between November 20 and November 30, the patient received 2,000,000 units of penicillin.

The course postoperatively was steadily for the better. The hemorrhagic bullae of the tongue disappeared; the gross bleeding from the nose, mouth, vagina, bowel and bladder stopped completely. The patient was discharged to her home on December 2, and has remained ambulatory since that time.

On January 15, 1947, the hemoglobin was still only 48 per cent and the erythrocyte count 2,650,000, but the platelet count had improved to 30,800, and the urinalysis showed essentially normal findings. A month later, the bleeding time was 1 minute, coagulation time 4 minutes, and the platelet count had climbed to 80,000. The hemoglobin was 81.6 per cent, erythrocyte count was 3,180,000, and the sedimentation rate 12 mm. in one hour. These latter improvements may be ascribed to massive doses of liver extract, iron, supplemental vitamins, etc.

By April 3, the hemoglobin was 95 per cent. The patient's weight had risen from a low of 111 pounds at the time of operation to 137 pounds, and she looked and said she felt perfectly well. The only complaint has been a recurrence of the facial butterfly dermatitis which had been quiescent for about six months. This partially subsided without treatment other than the avoidance of direct sunlight. The patient has been examined at bi-monthly intervals and appears to be recovered from the purpuric episode.

On November 7, the urinalysis showed acid reaction, specific gravity 1.017, 4-plus albumin, no sugar, and a very few erythrocytes and pus cells. The platelet count was 144,000. The patient's weight was 151 pounds and her general appearance excellent.

SUMMARY

The case reported presents one distinct difference from those previously described in the literature; namely, the manifestations of lupus erythematosus in a subacute stage were present prior to the recognition of thrombocytopenia (as manifested by severe purpura and generalized alarming hemorrhages). Moreover, splenectomy, performed as a life-saving measure after more conservative measures had failed, apparently cured not only the thrombocytopenia and hemorrhagic tendencies but actually seemed to improve the original generalized or disseminated lupus manifestations, including a remission in the nephritic and systemic symptoms.

CONCLUSION

This discussion is presented to refute, in part, the generally accepted belief that surgical operation of any kind is completely contraindicated in patients with lupus erythematosus in its disseminated form.

It is hoped that additional cases may be reported by others, in order further to clarify this rather beclouded subject.

311 South Floral Street.

REFERENCES

1. Cluxton, Harley E., Jr., and Krause, Louis, A. M.: Acute lupus erythematosus disseminatus, Annals of Internal Medicine, 19:843 (Dec.), 1943.

2. Denzer, Bernard S., and Blumenthal, Sidney: Acute lupus erythematosus disseminatus, American Journal of Diseases of Children, 53:525 (Feb.), 1937.

3. Keil, Harry: Relation between "systemic" lupus erythematosus and a peculiar form of thrombocytopenic purpura, British J. Dermatol. & Syph., 49:221-27, 1937.

4. Reifenstein, Edward C.: The medical aspects of acute disseminated lupus erythematosus, New York State Journal of Medicine, 42:2227 (Dec. 1), 1942.

5. Templeton, H. J.: Thrombopenia in acute disseminated lupus erythematosus, Arch. Dermat. & Syph., 29:700-702 (May), 1934.

Valve Deformity During Healing of Subacute Bacterial Endocarditis

JAMES A. BARR, M.D., and
CHARLES P. BAKER, M.D., *Oakland*

LESS than five years has elapsed since subacute bacterial endocarditis was first reported as curable with penicillin therapy.[9] There has been relatively little time, therefore, during which patients might be cured of the infection and subsequently die of cardiac or other complications. Brief reports of several cases in which autopsy was done are included in general reviews of penicillin therapy of this disease.[1,3,4,6,8,11] Most of the patients in these cases died in congestive heart failure.[1,3,6] Three additional detailed reports of cases in which the subacute bacterial endocarditis was healed and autopsy done later have been published. Rosenblatt and Loewe[12] reported two cases. A woman of 33 showed, during treatment with penicillin and heparin, a change in cardiac murmur from a short aortic systolic to both aortic and mitral diastolic and died in failure three months after completion of therapy. A second woman of 29 with mitral and aortic valve disease died in failure five months after clinical cure. Mokotoff and his co-workers[10] reported the case of a 36 year-old male with luetic aortic insufficiency and involvement of both aortic and mitral valves in the bacterial process who died in heart failure over eight months after completion of curative penicillin therapy. Honigman and Karns[7] reported the case of a woman of 30 with combined aortic and mitral valve disease, with murmurs becoming louder during therapy, and who died in congestive failure four months after completion of the treatment.

The following case report further illustrates the hazard of increasing valve deformity and subsequent cardiac failure during and after penicillin therapy of subacute bacterial endocarditis.

A white female former cannery worker, aged 46, was first seen on June 27, 1946, during an attack of paroxysmal auricular tachycardia. Carotid sinus and ocular pressure did not stop the attack, which promptly responded to mecholyl, 10 mg. given subcutaneously. The patient gave no history to suggest previous rheumatic fever or other serious illness. Her tonsils had been removed at age 12 and her appendix and one ovary at age 38. During the past ten months she had persistently run a fever, sometimes as high as 104° F. and accompanied by frequent chills, despite which she had been able to work until three months before being seen. She had lost 38 pounds in weight and much in strength and had a poor appetite. During this time her menstrual periods had been about twice as frequent as usual and more heavy. During the preceding three months there had been several attacks, lasting minutes or hours, of paroxysmal tachycardia. The presenting attack had lasted 36 hours before it was terminated. There had been no other type of cardiac embarrassment. After preliminary examination and short observation the patient was sent to Alameda County Hospital on July 20, 1946.

On examination there, the patient was emaciated and appeared chronically ill. The skin had a cafe-au-lait appearance but showed no petechiae. Conjunctivae and fundi were pale but showed no petechiae. The lungs were clear to auscultation and percussion. The heart was not enlarged and the tones were of normal quality. There was a somewhat harsh systolic murmur of grade 2 intensity at the apex and a separate, higher pitched systolic murmur localized to the aortic area. Blood pressure was 100 mm. systolic, 70 mm. diastolic. The liver edge was palpable at the costal margin,

From the Departments of Medicine and Pathology of Samuel Merritt Hospital and the Department of Clinical Pathology of Highland-Alameda County Hospital.

but not tender. The spleen was barely palpable. There was no edema.

A catheterized urine specimen showed no albumin, a light trace of sugar and only epithelial cells on microscopic examination. Blood examination revealed a hemoglobin of 8.3 gm. per 100 cc. Erythrocytes numbered 2,500,000 per cu. mm., and leukocytes 7,850 with 62 per cent segmented polymorphonuclear cells, 8 per cent banded forms and 30 per cent lymphocytes. The sedimentation rate was 116 mm. in one hour (Westergren), corrected. A blood culture showed growth of strep. viridans. A Kline test of the blood gave negative results.

On July 24 penicillin was started, 40,000 units every three hours by intermittent intramuscular injection. Ferrous sulfate in dosage of 1.1 gm. per day was started but discontinued in a week because of gastric intolerance. Blood transfusions were given on August 1 and 7 and September 6, the latter being discontinued when half completed because of a severe chill.

On July 25 there was a paroxysm of auricular tachycardia which was terminated after two days, during which 3.1 gm. of quinidine was administered. On July 29 a moderately loud early diastolic murmur of aortic insufficiency was first heard. On August 1 there was an episode of abdominal pain, nausea and diarrhea. Stools were negative for occult blood. On August 5 the aortic diastolic murmur was noted as being louder. The spleen was no longer felt. The blood pressure was 125 mm. systolic, 55 mm. diastolic. There were two more short paroxysms of tachycardia, one controlled by carotid sinus pressure, the other by quinidine. After this the patient was maintained on 0.2 gm. of quinidine, twice a day. On August 19 penicillin dosage was increased to 100,000 units every three hours because of suspected lack of response of the infection as indicated by continued elevation of temperature and sedimentation rate. On August 22 the apical systolic murmur was noted as being increased in intensity. On September 7 urinalysis showed a marked trace of albumin, 40 to 60 leukocytes and 2 to 4 erythrocytes per high power field, and a positive reaction to a test for occult blood. Penicillin was discontinued on September 16, a total of 27,720,000 units having been given. Hemoglobin had fluctuated between the original 8.3 gm. and 10.5 gm. All blood cultures, five in number after penicillin was started, were negative. The patient was dismissed on October 7, 1946.

On October 30 dyspnea, orthopnea and edema were first noted. In addition to the other murmurs, a presystolic rumble of mitral stenosis was heard. Blood pressure was 130 mm. systolic, 60 mm. diastolic. Digitalis and salt restriction temporarily controlled the congestive failure. Because of return of symptoms of congestive failure the patient was re-hospitalized from January 28 to March 25, 1947. During this time, therapy for the congestive failure was unsuccessful and there was an episode of possible pulmonary infarction. Results of urinalysis were normal. Hemoglobin measured 13.8 gm. per 100 cc. of blood, and results of two blood cultures were negative. The patient was released from the hospital. During the next month signs of congestive failure increased and the patient died May 2, 1947.

Only the postmortem findings of the heart and related lesions will be described. The heart weighed 360 gm. (estimated normal, 290 gm.). The color was light brown and there was a normal amount of epicardial fat. The consistency of the muscle was increased, but this was probably due to the arterial embalming. The tricuspid and pulmonary valves

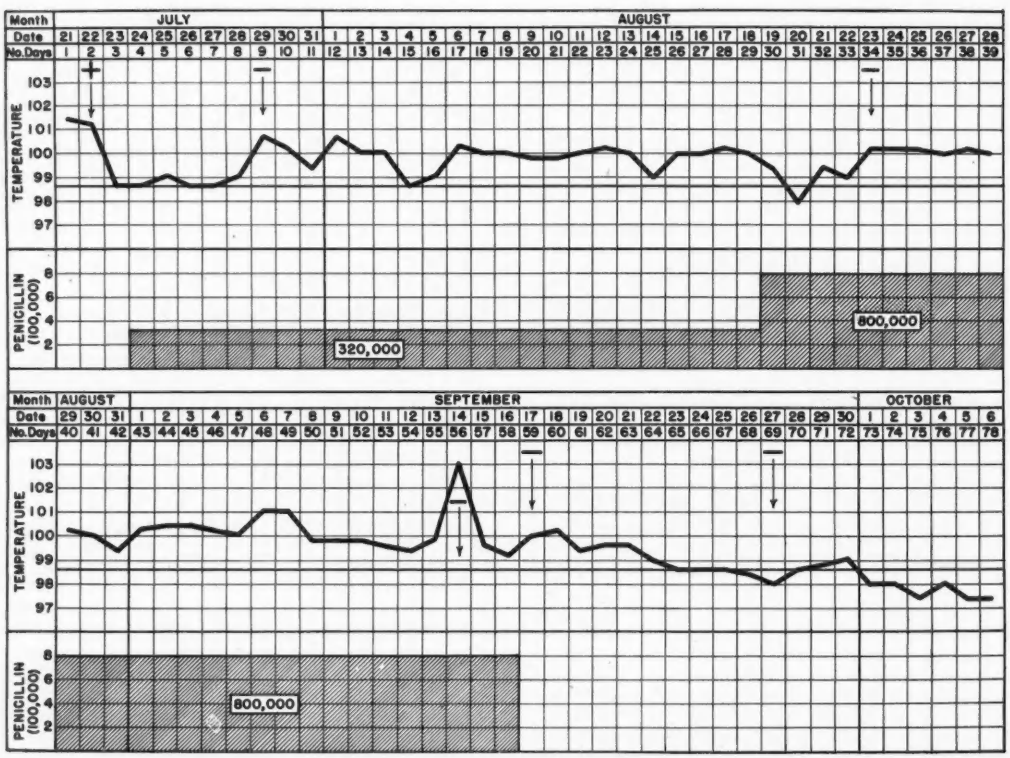


Chart 1.—Temperature chart with penicillin dosage and results of blood cultures.

were normal. The mitral valve leaflets were enormously thickened and formed a slit-like orifice which opened and closed incompletely. (Figure 1) The chordae tendineae were short and thick and the papillary muscles were hypertrophied. In the mid-portion of the opened valve there was a brownish, discolored area. This was thought to be the site of the vegetation. Sections showed blood pigment, but no evidence of an active vegetation. The aortic valve leaflets were thick and cartilaginous, with the edges somewhat rolled, and there were small, irregular nodules attached to the leaflets. (Figure 2) These were areas of lime salt deposit. No vegetation was found. No mural thrombosis was found in the heart.

Infarcts were noted in the lungs, spleen, and right kidney.

It is unfortunate that only one blood culture was taken before penicillin therapy was started in this case. However, the clinical course both before and after treatment was started, and particularly the prolonged fever and evidence of multiple emboli in the systemic circulation, was so typical that the diagnosis of subacute bacterial endocarditis appears to have been adequately proven. It is difficult to determine whether the persistent fever, which did not subside until after penicillin therapy was discontinued, was due to the suspected and later proven infarctions, to dissolution and absorption of the vegetations, or to the therapy itself. Of particular interest was the development of an aortic diastolic murmur within five days and of increased pulse pressure within 12 days of the beginning of therapy. Evidence of congestive failure developed within three months and in nine months the patient died of heart failure which was resistant to treatment. At autopsy there was evidence of marked deformity of both aortic and mitral valves.

Figure 1.—Mitral valve.

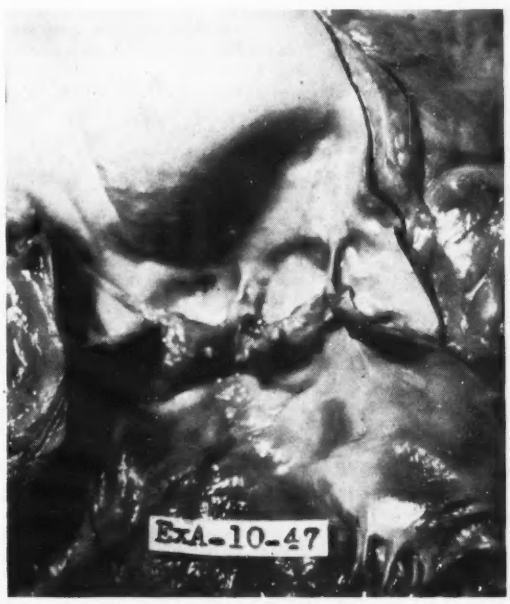


Figure 2.—Aortic valve.

Death from congestive failure shortly after completion of therapy, and particularly when the aortic valve was involved in the bacterial infection, has been reported by several authors.[1,3,5,6,7,10,12] Bloomfield[2] has commented that the development of failure in so short a time in such a high percentage of patients with uncomplicated cardiac lesions, can hardly be ascribed to coincidence. He and others[7,10] have felt that shrinking and deformity which occur during the process of healing and scarring of the infected valve is largely responsible for this untimely failure. The case reported in this presentation provides further evidence in favor of this hypothesis and particularly indicates how soon after beginning therapy this progressive valve deformity may start.

SUMMARY AND CONCLUSIONS

1. A case of healed subacute bacterial endocarditis with marked deformity of aortic and mitral valve and death in congestive failure, is reported.

2. Comment is made on the early clinical evidence and subsequent pathological evidence of progressive valve deformity during the healing of the bacterial process.

REFERENCES

1. Bloomfield, A. L., et al: The treatment of subacute bacterial endocarditis with penicillin, J. Clin. Investigation, 24:251-267 (May), 1945.

2. Bloomfield, A. L., and Halpern, R. M.: The penicillin treatment of subacute bacterial endocarditis, J.A.M.A., 129: 1135-1141 (Dec. 22), 1945.

3. Dawson, M. H., and Hunter, T. H.: The treatment of subacute bacterial endocarditis with penicillin, Ann. Int. Med., 24:170-185 (Feb.), 1946.

4. Favour, C. B., et al: Progress in the treatment of subacute bacterial endocarditis, New England J. Med., 234:71-77 (Jan. 17), 1946.

5. Flippin, H. F., et al: Penicillin in the treatment of subacute bacterial endocarditis, J.A.M.A., 129:841-843 (Nov. 24), 1945.

6. Glaser, R. J., et al: The treatment of bacterial endocarditis with penicillin, J. Lab. and Clin. Med., 31:291-312 (March), 1946.

7. Honigman, A. H., and Karns, J. R.: Healed subacute bacterial endocarditis, report of two cases with death due to congestive heart failure, Ann. Int. Med., 26:704-712 (May), 1947.

8. Levy, Louis, and McKrill, Ned: Results in treatment of subacute bacterial endocarditis, Arch. Int. Med., 77:367-384 (April), 1946.

9. Loewe, Leo, et al: Combined penicillin and heparin therapy of subacute bacterial endocarditis, J.A.M.A., 124: 144-149 (Jan. 15), 1944.

10. Mokotoff, R.: The treatment of bacterail endocarditis with penicillin, results of 17 consecutive unselected cases, Am. J. Med. Sci., 211:395-416 (April), 1946.

11. Priest, W. S., et al: The effect of anticoagulants on the penicillin treatment and pathological lesions of subacute bacterial endocarditis, New England J. Med., 235:699-706 (Nov. 14), 1946.

12. Rosenblatt, P., and Loewe, Leo: Healed subacute bacterial endocarditis, Arch. Int. Med., 76:1-10 (July), 1945.

Hiatus Hernia: Coincident Hematemesis

A. Lincoln Brown, M. D., and
Sanford E. Leeds, M. D., *San Francisco*

HIATUS hernia has been cited as a cause of hematemesis or anemia. The frequency of hiatus hernia and coincident anemia or hemorrhage is sufficiently striking to make this problem one of practical interest. We agree with Shaler and Hampton[5] that unless gastritis or ulceration is present, hiatus hernia per se will not cause bleeding.

It is also true that when a hiatus hernia has been demonstrated to be present, the coincidental presence of other lesions in the gastrointestinal or cardiorespiratory systems must not be overlooked. Ulceration and incarceration of the herniated portion of the stomach may be demonstrated by barium studies. If no ulceration is demonstrated, other sources of the bleeding should be considered. Usually, marked constriction and fixation of the stomach at the hiatus ring is necessary to produce ulceration, and this condition may be demonstrated by roentgenologic methods.

The symptom of hematemesis associated with a hiatus hernia occurred in slightly more than 25 per cent of a group of Harrington's patients. In seven of eight cases in which bleeding occurred there were positive findings, upon operation, of ulceration of the herniated stomach. He states: "Hemorrhage . . . . usually is indicative of severe incarceration with fixation of the stomach in the thorax. The bleeding is caused by erosion of the mucous membrane due to the forceful pressure exerted during the attacks of vomiting on the large, distorted, congested and fixed stomach. This erosion may be superficial, or, in cases of long standing, may form a definite ulceration from repeated trauma."

Sahler and Hampton[4] reviewed 221 cases of hiatus hernia, in 32 of which the patients had either moderately marked anemia or a positive history of gastrointestinal-tract bleeding. They conclude: "Bleeding caused by hiatus hernia is probably due to constriction of the hernial ring with resultant gastritis and ulceration of the herniated fundus. *If neither gastritis nor ulceration is present, the lesion will not cause bleeding.*"

The association of anemia and chronic bleeding with a coincident diaphragmatic hernia has been commented upon by others[1,2,4,6,7] and is not unusual. We believe the anemia to have been formerly too often attributed erroneously to the hernia per se. When hematemesis occurs in the presence of hiatus hernia other causes of bleeding from the gastrointestinal tract, which must be considered, include esophageal varices, polyps, other benign and malignant tumors of the stomach with ulceration and peptic ulceration of the stomach or duodenum.

A case report illustrating the necessity for a search for another cause of hematemesis than the hiatus hernia per se, is presented.

The patient was an elderly white female 67 years of age who had an episode of hematemesis in 1942 without preceding symptoms. At that time, the hemoglobin dropped to 6.5 gm., and the erythrocyte count to 2.71 million. A roentgenologic examination revealed a diaphragmatic hernia of the hiatus type. At this time the hematemesis was attributed directly to the hiatus hernia.

The patient was then well until June 26, 1946, when she had a tarry stool associated with nausea and weakness. She felt ill and had periods of faintness until July 2, 1946, when she was admitted to the hospital because she fainted after vomiting dark brown material and some bright red blood.

The past history was not suggestive of peptic ulcer although the patient had occasionally been nauseated and had vomited during the preceding five years. She had been anemic and had "fainting" spells, the exact nature of which was not known. The stool was positive for occult blood on several occasions during the preceding four years. The normal hemoglobin level was well maintained on a convalescent diet including ferrous sulfate and vitamins. The patient had been on a reducing diet containing a moderate amount of raw vegetables for three months prior to the acute hemorrhage.

Physical Examination. Physical examination revealed a moderately obese woman of 67 who was pale and weak from recent loss of blood. The blood pressure on entry was 105 mm. systolic and 70 mm. diastolic, the pulse rate was 94, and the temperature 37.2° C. The heart was not enlarged, there were no murmurs, and the rhythm was regular. The previous day she had visited her doctor, who had found the rhythm was very irregular and suggestive of fibrillation. The abdomen was moderately obese and soft. There were no scars or masses palpable and no tenderness elicited.

Laboratory Data. The erythrocyte count on entry was 1.9 million and the hemoglobin 4.2 gm. (25 per cent). The leukocyte count was 12,000 with 83 per cent polymorphonuclears. The color index was 0.66. The urine was normal and results of Wasserman and Kahn tests were negative. A non-protein nitrogen determination was normal. An electrocardiogram tracing was normal.

Treatment and Course. Six transfusions of whole blood, Rh negative, were given in the next five days. The blood pressure had fallen to 92 mm. systolic, 60 mm. diastolic on July 3, remained in the neighborhood of 100 for several days and rose to 130/82 on July 7. The hemoglobin gradually rose to 10.5 gm. (62.5 per cent) and the erythrocyte count to 3.32 million on July 6. The pulse remained about 90, and the respirations 20. An electrocardiogram on July 2 was reported as showing evidence of myocardial damage of non-specific pattern.

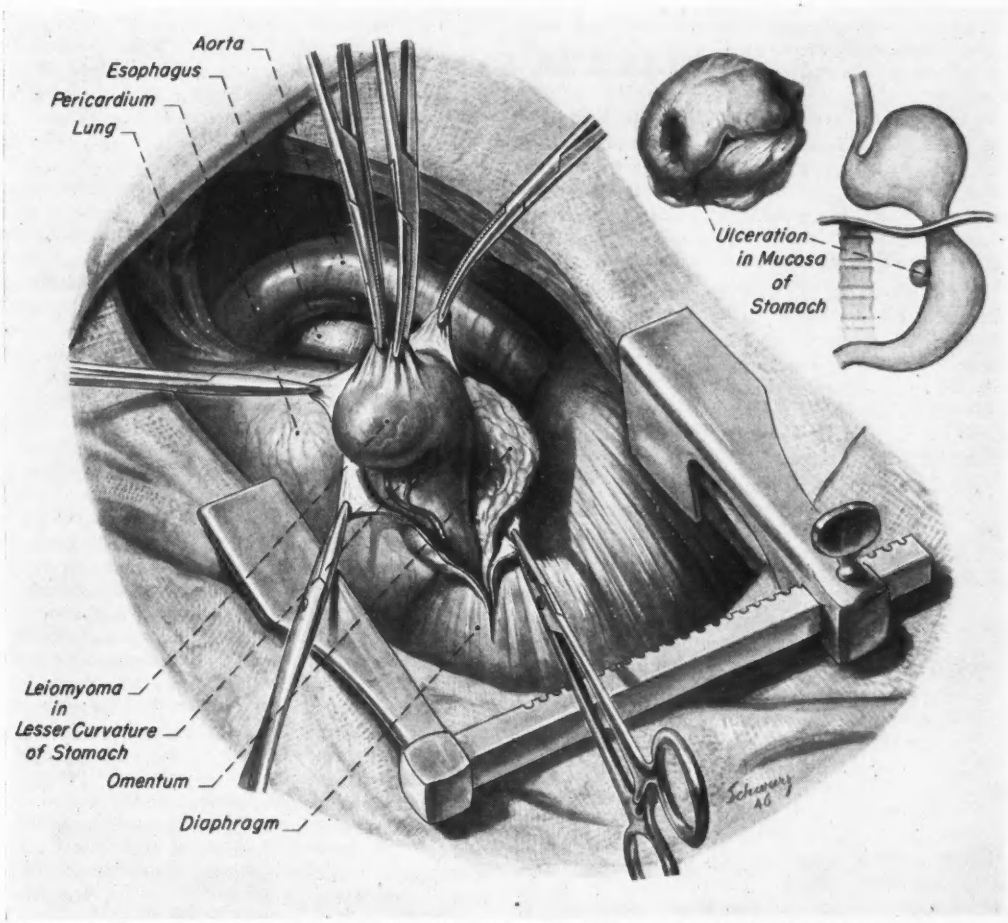
On July 7, the patient was transferred to the hospital for operation. Her general condition was good. The blood pressure was 140 mm. systolic, 80 mm. diastolic, erythrocyte count was 3.5 million with hemoglobin 11 gm. (72 per cent). The total protein was 6.7 gm. per cent with albumin 4.9 gm. per cent and globulin 1.6 gm. per cent. It was considered that the condition of the patient did not warrant repeating the roentgenographic examination of the stomach.

Operation. On July 10, 1946, a transthoracic operation was performed on the left. Posterior to the heart and anterior to the aorta there was a large hernia consisting of the upper portion of the stomach, measuring 10x7 cm. The esophagus extended to within 3 cm. of the hiatus in the diaphragm. The hernia ring was large and did not constrict the stomach. There were no ulcerations, constriction or varices and no cause for the hematemesis was found, so it was decided to explore beneath the diaphragm. There was a true hernia sac over the herniated stomach. This was demonstrated when the diaphragm was opened and the stomach delivered into the chest cavity. On the lesser curvature of the stomach, approximately half way between the cardia and the pylorus, there was an intrinsic tumor mass, 3.5 cm. in diameter. This was round, firm, slightly nodular and freely movable. There was no enlargement of the neighboring lymph nodes and the tumor had the appearance of a benign leiomyoma of the stomach. (See Figure.)

A wedge resection of the stomach was carried out and the stomach closed at right angles to the long axis. The diaphragm was repaired and the hernia sac overlapped to obliterate the space formerly occupied by the hernia. The duration of the operation was two hours and thirty-three minutes.

Postoperative Course. The postoperative course was smooth. The temperature was 37° to 38° C. for eight days, after which the patient was afebrile. Thoracentesis was performed almost daily until July 18, the amount of fluid, thin and pink, obtained varied from 20 to 450 cc. After July 20 no fluid was obtainable. One transfusion was given during the operation,

From the Surgical Service, Thoracic Surgery Section, Mount Zion Hospital, San Francisco.



Hiatus Hernia incised and incision extended parallel to fibers of diaphragm, showing tumor (leiomyoma) lesser curvature of stomach delivered into chest cavity.

and 1,000 cc. of blood was given after the operation. An additional 500 cc. of blood was given on the 12th postoperative day. The wound healed per primum except for a small portion which contained a hematoma, and this was opened. This portion healed secondarily without difficulty. The patient was discharged from the hospital July 30, 1946, three weeks after operation.

SUMMARY AND CONCLUSIONS

1. Hiatus hernia is not a primary cause of hematemesis but only secondarily causes bleeding when incarceration of the stomach results in (a) gastritis (b) erosion and ulceration of the gastric mucosa (c) congestion and production of local varices. This latter is a possibility which is open to question.

2. Hiatus hernia, uncomplicated, rarely if ever causes hematemesis or anemia.

3. The presence of an hiatus hernia should not lead one astray in making a diagnosis when the presenting symptom is gastrointestinal hemorrhage.

4. If neither the preoperative studies nor the findings at operation reveal the cause of the bleeding, further search above and particularly below the diaphragm is strongly indicated before one could be satisfied that the hiatus hernia per se is the cause of the hematemesis or anemia.

5. A case of gastrointestinal bleeding due to an ulcerated leiomyoma of the stomach in a patient with a coincident hematemesis is reported.

REFERENCES

1. Bock, A. V., Dulin, S. W., and Brooke, P. A.: Diaphragmatic hernia and secondary anemia; ten cases, New England Journal of Medicine, 209:615 (Sept. 28), 1933.

2. Gardner, K. D.: Diaphragmatic hernia associated with secondary anemia, American Journal of Medical Science, 185:561 (April), 1933.

3. Harrington, S. W.: Diaphragmatic hernia associated with traumatic gastric erosion and ulcer, Collected Papers, Mayo Clinic, 21:790, 1929.

4. Moller, Folke: Zwerchfellhernie und Magenkarzinom. Zugleich einige Betrachtungen uber Blutungen und Anamien bei Zwerchfellhernien, Acta Med. Scandinav., 74:421, 1931.

5. Sahler, O. D., and Hampton, A. O.: Bleeding in hiatus hernia, American Journal of Roentgenology, 49:433 (April), 1943.

6. Segal, H. L.: Secondary anemia associated with diaphragmatic hernia, New York State Journal of Medicine, 31:692 (June 1), 1931.

7. Weitzen, Max: Diaphragmatic hernia with severe anemia, American Journal of Roentgenology, 28:808 (Dec.), 1932.

CLINICAL SYMPOSIUM

Prepared under the direction of EDGAR WAYBURN, M.D., *San Francisco*, and CLARENCE J. BERNE, M.D., *Los Angeles*

Carcinoma of the Thyroid Gland

Clinical Problems:

DR. MORRIS DAILEY: The clinical problem of carcinoma of the thyroid is, in essence, the differential diagnosis of non-toxic, nodular goiter. Diffuse toxic goiters may be ruled out immediately. They have no relation to malignancy. Likewise, diffuse, non-toxic goiters may rarely be malignant. The overwhelming majority of carcinomas of the thyroid have one or more nodules.

One paradox which demands explanation is the frequency of the disease, relatively, in surgical specimens, and the rarity of it in autopsy material. From Boston we learn that the incidence of carcinoma of the thyroid in postmortem material is five in 19,000; in Los Angeles it is in the neighborhood of one in 1,000 from the Los Angeles County General Hospital; and, in this hospital, somewhere around one in 400. On the other hand, in surgical specimens of non-toxic goiter the incidence varies from 1 to 7 per cent. That is in unselected non-toxic, nodular goiter. Our figure happens to be about 5 per cent. We feel that the evidence from the postmortem table is quite inadequate to establish the frequency of disease. The first reason is that in a charity hospital, which these figures come from, the postmortem material has been diluted to a great degree by such common conditions as cardiovascular disease and traumatic accidents. The second reason is that people with carcinoma of the thyroid do not stay in the hospital—they don't die here, but have their operation and go home, and we may have great difficulty in tracking down any postmortem records of them. Those are two reasons, and the third reason is that I believe we are talking about two different groups of people: On the one hand are those who in life have had nodules that have grown and caused pressure symptoms and hence come to operation; on the other hand are the silent, asymptomatic nodules in the postmortem material.

Sixteen per cent of our patients with carcinoma of the thyroid have been under the age of 20, one-third under the age of 30. It is an entirely different age group from those affected by most types of malignancy. Although involutionary nodules are more common in women than in men, the likelihood of a given nodule in the thyroid being cancer is greater if it is in a man. To put it into figures, the chances of a man's non-toxic, nodular goiter being carcinoma is 1 in 17; in the case of women, 1 in 44.

In general, we want to be suspicious of nodules of recent origin—that is, in the preceding two or three years. Involutionary nodules may grow and extend in size by cystic degeneration, with or without tenderness right over the nodule, but growth occurs more commonly in malignant nodules.

The actual symptoms, no different than those in other types of goiter, are due to local pressure on surrounding structures. In the order of commonness they are: A local feeling of pressure, cough, dysphagia, hoarseness, and frequently having to clear the throat. Many writers on the subject say that hoarseness is exceedingly suspicious of malignancy. We do not believe this. A third of each group has hoarseness, but if we put in a mirror we find it is due to causes other than malignant growth: In malignancy the cord is paralyzed, while the hoarseness in the involutionary group is due simply to pressure and displacement of the larynx. Nearly a third of the patients have no symptoms. The tumor may be so small it doesn't happen to press on any surrounding structure; or it may be that metastatic spread has occurred and the patient has come for other reasons such as pain in the back or legs or protrusion of the eyes.

On examination of the patient, the most important and overwhelming point is the discovery, on palpation of the thyroid gland, that there is a single nodule. I said at the beginning that we won't expect to find malignancy in diffuse goiters, but our records regarding a single nodule in the thyroid gland indicates these expectations: 16 per cent, regardless of any other factor, will actually be malignant; an additional 25 per cent will be benign tumors. We have, right there, a 40 per cent chance of a tumor of the thyroid simply on the basis of the nodule being an isolated one. The actual consistency of the nodule isn't helpful. On the one hand, involutionary nodules may be firm and hard; on the other, carcinomas of the thyroid may feel meaty and relatively spongy or rubbery. Many articles on the subject speak of the stony hardness of the malignant goiter, but that description is inappropriate in our experience.

The actual treatment of this disease can be summarized briefly. The finding of a solitary nodule demands, not that the nodule be resected but that the lobe be removed, including a portion of the isthmus. If there is any suspicion at operation that cervical nodes are involved, radical neck dissection is carried out. In general, postoperative radiation is not used, except for relief of specific symptoms. In the very anaplastic carcinoma, the one almost simulating a sarcoma, which may have grown up in a period of two or three months and throttled the patient from

Taken from the Medical Staff Rounds, University of California Hospital, November 19, 1947.

pressure, the surgical attack is exceedingly difficult and may be simply a matter of putting a tracheotomy tube in place. If respiratory obstruction doesn't occur, the procedure is to remove as much of the gland as possible and then put faith in the effects of radiation.

There is one point in regard to treatment that needs underscoring: Patients with this disease can tolerate remote metastases for a long time. The demonstration of metastases in bone marrow or lungs, for instance, should in no sense be an excuse for not making an attack on the local disease and removing as much of it as possible. The reason for this opinion is that in our 90 cases, ten of the patients have actually had remote metastases—in the lungs and bone, one in the breast—for a period of from three to seventeen years. One man had had a goiter removed when he was about six years of age. He is now a college student and has metastases in the lung from the original tumor. The moral is clear: We shouldn't give up because of remote metastases.

The follow-up of our patients now shows an average survival of 49 months among those with well differentiated malignancies. Of ten patients in the highly anaplastic group, six are dead—this in a follow-up period of only 14 months. Of the total of 90 patients, 21 are dead, 11 of them from respiratory obstruction. Eight of the remainder died from remote metastases, and two of diseases not connected with the carcinoma, although they still harbored carcinoma.

These are the facts, and some of the points to consider when the patient is in front of you are history of growth, nodular consistency, lack of family history of goiter, concurrent symptoms of pressure. On physical examination, the most important point is the finding of a solitary nodule, regardless of anything else.

Pathological Diagnosis:

DR. STUART LINDSAY: Carcinoma of the thyroid gland is not an uncommon disease. Clinicians are recognizing this process more often than they have in the past, and pathologists with experience are recognizing early malignant thyroid processes which formerly were missed. Like other malignant neoplasms, some carcinomas of the thyroid arise from previously benign tumors. Often the tumor is so extensive by the time it is examined that its site and manner of origin are obscure.

In a recent study of 96 single nodules of the thyroid gland, 38 were involutionary nodules. These nodules are not neoplasms, but are the result of repeated episodes of hyperplasia and involution usually not associated with clinical evidence of toxicity. Thirty-seven of the nodules were neoplasms, and 15 of these were invasive or malignant carcinoma. Eighteen of the 96 nodules were placed in the unclassified group. We were unable to determine whether these nodules were of involutionary origin with proliferative changes or were true neoplasms with some degree of differentiation. The important point to remember is that they are nodules which show evidence of growth and may very well be the precursors of malignant tumors. In a study of 88 multinodular goiters, there were 64 involutionary nodules, 14 adenomas, seven carcinomas and only three unclassified nodules.

In the group of benign neoplasms there are adenomas of four different types. In the less differentiated tumors the cells are arranged in solid sheets. Some show increasing differentiation with formation of acini. As the latter become larger, colloid secretion accumulates in them. The papillary tumors are rather common. We believe that papillary thyroid tumors originate from the thyroid gland and not from aberrant thyroid tissue.

Grossly, the benign neoplasms have a characteristic appearance. They are circumscribed and encapsulated. On section they present a uniform homogeneous appearance and have a pinkish-tan color and a glistening parenchyma with little visible colloid.

In their simplest form, involutionary nodules are composed of very large acini filled with colloid and lined by flattened epithelial cells. Sooner or later there is a secondary proliferation of thyroid tissue, presumably arising by budding from pre-existing acini. Between these large acini, smaller acinar structures grow and may produce a solid growth. Histologically, one cannot distinguish the cells making up this proliferating growth in an involutionary nodule from those of an adenoma or carcinoma. We have suspected for some time that this proliferating tissue in the involutionary nodule might give rise to a malignant tumor, in the same manner that the proliferating tissue of an adenoma may become malignant. In our study of over 100 cases of carcinoma of the thyroid gland there were three cases in which we could be certain from the microscopic appearance that carcinoma had originated in an involutionary nodule. These showed the usual benign proliferation, but in certain areas showed definite histological evidence of malignancy plus invasion into adjacent tissues. In one case distant metastases were present. These findings bring up the question as to whether every involutionary nodule should be removed prophylactically, since this secondary proliferation is so common in involutionary nodules.

In general the malignant tumors present a more variegated appearance, with necrosis and hemorrhage, than do benign tumors. Microscopically a wide variety of patterns is seen in carcinoma of the thyroid gland. One of the more common types is papillary carcinoma. These show gradations from the papillary adenomas to papillary carcinomas of varying degrees of malignancy. In general, the same changes occur in these carcinomas that occur in carcinomas elsewhere in the body. With increasing growth activity, the cells covering the papillary progress become more stratified, pleomorphic, hyperchromatic, until the papillary arrangement of tissue is lost and the pattern becomes largely anaplastic.

Some carcinomas show acinar formation and, at times, the acini closely resemble those of a normal gland. They are lined by uniform cells and may contain abundant colloid. In most carcinomas of the

thyroid gland there is some attempt at differentiation toward thyroid tissue resembling the normal. Other patterns show more solid anaplastic growth. The highly malignant types of thyroid carcinoma may contain multinucleated and spindle cells. They may resemble malignant connective tissue tumors, but sarcomas of the thyroid gland have not been encountered in the University of California Hospital pathology laboratory.

Not all carcinomas of the thyroid are large enough to be felt by the patient or the physician. A young woman presented herself with a row of enlarged lymph nodes in one side of the neck. The nodes were biopsied and found to contain papillary thyroid tissue. Since, in our experience, lateral aberrant thyroid tissue has been metastatic, we felt there must be a primary carcinoma in this thyroid gland, even though no tumor could be palpated. A total thyroidectomy was done. A very small papillary carcinoma with local extension was found.

Clinical Aspects of Treatment with Radioactive Iodine:

DR. EARL MILLER: Radioactive and inert iodine are biologically and chemically identical. The thyroid has a high selective iodine uptake, and administered iodine remains in the gland for a long time. Radioactive iodine emits radiation and it can be followed by following the course of the radiation. Certain diseases are controllable by radiation—for example, carcinoma and Graves' Disease—thus making the clinical use reasonable. Penetrating radiation acts by ionization. Whatever the source of the radiation, ionization is produced and tissue destroyed by it.

The distribution of the iodine in the thyroid can be shown by the distribution of the radiation from the iodine. This radiation can destroy the cells that have taken up the iodine.

Radioactive iodine can be made either in the cyclotron or in the pile. We get ours from the pile at Oak Ridge. Tellurium, an element of atomic weight 130 (52 protons plus 78 neutrons) is put in the pile and irradiated by neutrons. A neutron is captured by the nucleus which increases its weight to 131. The nucleus now has 52 protons and 79 neutrons. The fact that it has 52 protons makes us call it tellurium. This tellerium 131, because it is radioactive, give off a beta particle (a negatively charged electron). When it does that, one of the neutrons in the nucleus becomes a proton. This gives a total of 53 protons and 78 neutrons, which makes it the element iodine.

The material comes as a water-clear, tasteless solution. We predetermine the amount we want to give the patient. This amount then is measured out, diluted with water, and the patient drinks it. Several mouthfuls of ordinary water is drunk following this, in order to wash out the glass and the patient's mouth.

The half-life of the material must be taken into account. Suppose today we receive a bottle which contains a thousand millicuries. Eight days later, there will be 50 per cent, or 500 millicuries, left. By making such a plot of decay, one can tell at any time the concentration of the iodine in millicuries per cc. This is important because this material actually decays at a fairly rapid rate.

Both beta particles and gamma rays are given off. The beta particles are the ones most important in the treatment, but very conveniently this gamma ray is present. It is a very penetrating radiation and allows us to measure the radiations from (and therefore the amount of) iodine 131 at a distance from the patient. It is also fortunate, that the relationship of the number of beta to gamma rays is of the order of 100 to 1, so that every time one gamma ray proton is measured we know that there have already been a hundred beta particles acting on the patient.

The amount of iodine available to the patient is the administered dose minus that lost by decay and excretion. In many of our curves, the uptake and the amount lost to the patient add up to the total amount administered. Note the fact that the thyroid takes up a great deal of the administered iodine, and therefore the radiation is fairly well limited to the thyroid. The various uptake curves can be used diagnostically. In the case of very marked hypothyroidism or thyroiditis the uptake will be low, if the thyroid is normal the uptake will be higher, and in hyperthyroidism still higher.

California Cancer Commission Studies*

Chapter XII

Cancer of the Oral Cavity

GEORGE S. SHARP, M.D., *Los Angeles*

ORAL cancer occurs in a wide variety of forms, and in differing degrees of malignancy. A flexible treatment program is therefore required, adaptable to each individual case. In some instances, cancer is best treated by operative methods, while in others it responds best to radium and roentgen therapy alone, and in still others both surgery and radiation are required.

Cancers in the different parts of the oral cavity are similar, one to another, in several respects. For this reason it seemed advisable to combine the discussion of etiology, precancerous lesions, and differential diagnosis for all forms of oral cancer. Clinical appearance, histopathology, treatment and prognosis, however, differ so widely that they are dealt with separately for (a) tongue, (b) floor of the mouth, (c) mucosa of the cheeks, (d) gums, (e) hard and soft palate.

Early recognition of cancer determines in a high percentage of cases whether therapy will be successful and the patient will survive. For this reason, it is necessary to investigate closely whenever a patient complains of a "vague feeling of something" in his mouth. Benign tumors, though they may seem ever so insignificant, are abnormal, and may be in the process of changing toward malignancy under the influence of irritation. (Figures 1 and 2.)

The possible presence of cancer should be suspected in all such instances, and a tissue specimen should immediately be removed for microscopic examination. The excision of a sample of the growth for biopsy neither contributes to the surface spread of oral cancer nor increases the incidence of metastases. The cost of the pathologic examination should never prove a deterrent: In case of needy patients, most pathologists, upon request of the physician, perform it without charge.

ETIOLOGY

Among the factors responsible for oral cancer, the most frequent are chronic irritation, and inflammation. They may be brought on through oral sepsis, various dental factors, and excessive use of tobacco. The dental factors include periodontal disease, advanced dental caries, injury due to jagged, broken, worn, or rough teeth, and ill-fitting dentures. Oral cancer seems, furthermore, to be related to a group of constitutional diseases, as for instance avitaminosis (especially vitamin B deficiency), hypochromic anemia, and syphilis. A positive reaction to a Wassermann test does not mean that cancer is not present. It may well be that oral cancer never de-

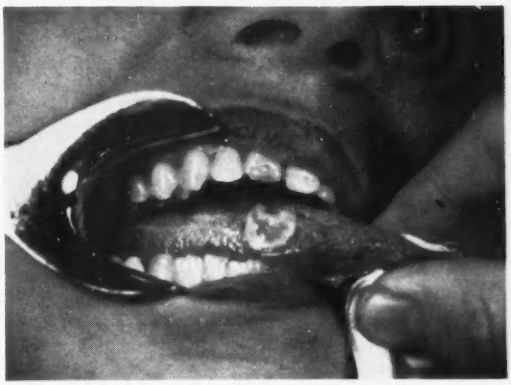


Figure 1.—*Chronic Non-Specific Ulcer.* A granular ulceration, 1.5 cm. in diameter, is seen on the right border of the tongue, midway between tip and lingual tonsil. It has a greyish tinge and is firm, but not indurated. The treatment of choice for all non-specific chronic ulcers is simple excision of the lesion for the purpose of biopsy as well as therapy.

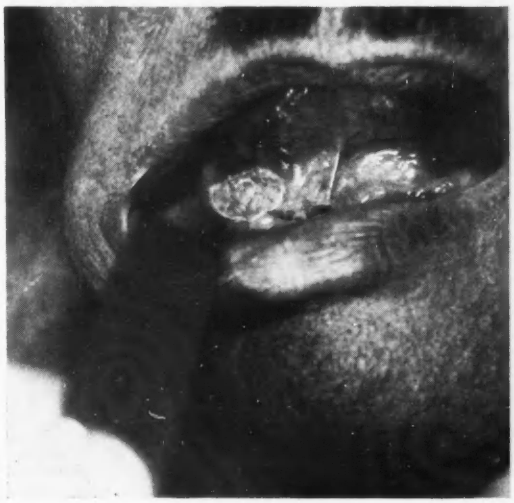


Figure 2.—*Tuberculosis.* A superficial, granular and sloughing ulceration, 1.5 cm. in diameter, is seen on the right side of the floor of the mouth. The lesion is of soft consistency; the margin is fairly well defined, but not rolled. The patient has active pulmonary tuberculosis.

*Organized by the Editorial Committee of the California Cancer Commission.

velops from any single one of these factors, but rather from an interplay of a number of conditions, or from a specific constitutional susceptibility.

PRECANCEROUS LESIONS

The term "precancerous" implies only the possibility, not the inevitability, of malignant degeneration. In certain abnormal states, the oral mucosa is more likely to undergo cancerous change. It has to be assumed that mucous membrane which upon extraneous stimulation produces leukoplakia, keratosis, or immediately cancer, may be inherently abnormal in its tissue reactions. Therefore, the designation "precancerous" should rather be applied to such an abnormal type of mucous membrane, than to the states resulting from anomalous tissue reaction, of which leukoplakia is the most frequent. Inflammations or leukoplakia, singly or combined, were encountered in the mucous membranes of about 50 per cent of all patients with oral cancer. Leukoplakia is most commonly encountered on tongue (Figure 3) and gums, and in later stages usually becomes more diffuse, to cover the hard and soft palate. The factors responsible for leukoplakia are identical with those of cancer itself, enumerated previously.

Clinically, leukoplakia appears in the early stages as a non-palpable, faintly translucent white discoloration. Later on, localized or diffuse papillary plaques of irregular outline develop, opaque white in color, and of fine granular texture. In the late stage, which occurs only in certain cases, the epithelium piles up, forming a more or less circumscribed, thick, white covering of the organ involved. In this phase, characterized by induration, the mucous membrane becomes thick and stiff, and fissures, papillomas (Figure 4) and ulcers are encountered, which must be considered malignant until proven otherwise by biopsy. Furthermore, papillomas, fibromas, lipomas, and even small mucous cysts may become covered by leukoplakia.

DIFFERENTIAL DIAGNOSIS

Definite distinction between cancer and benign lesions is possible only on the basis of microscopic examination. A specimen, several millimeters in diameter, should immediately be removed from the edge of the growth by means of a scalpel, biting forceps, or curved specimen forceps, in such a manner that the tissue will not be crushed.

While there are certain characteristics which may tend to distinguish between benign and early malignant lesions they are so common to both that they cannot be depended upon.

Every thickening on a broad base, all small ulcers, and even a loose tooth which cannot be traced to periodontal disease, must be regarded as an indication of cancer, until proven otherwise *through biopsy.*

CANCER OF THE TONGUE

Eighty per cent of cases of cancer of the tongue occur in the male. It is more frequent along the lateral borders (50 per cent), and on the dorsum (30 per cent), than at the tip (10 per cent), or base (10 per cent) of the tongue.

Lingual carcinoma usually starts as a minute area of overgrowth, noticeable upon digital palpation. As a rule, invasion of the submucosa and the muscularis takes place early, and produces an indurated nodule

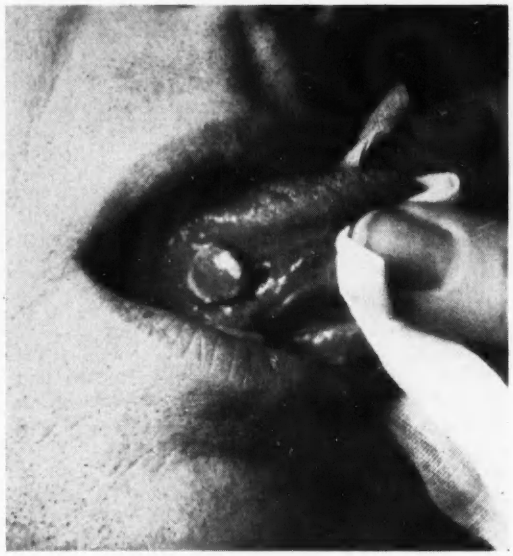


Figure 3.—*Benign Papilloma with Superimposed Leukoplakia, Precancerous.* A benign papilloma, 1.5 cm. in diameter, and growing from a narrow base, is seen on the undersurface of the right border of the tongue. Due to irritation by the teeth, leukoplakia has developed on the surface of the papillomatous growth.

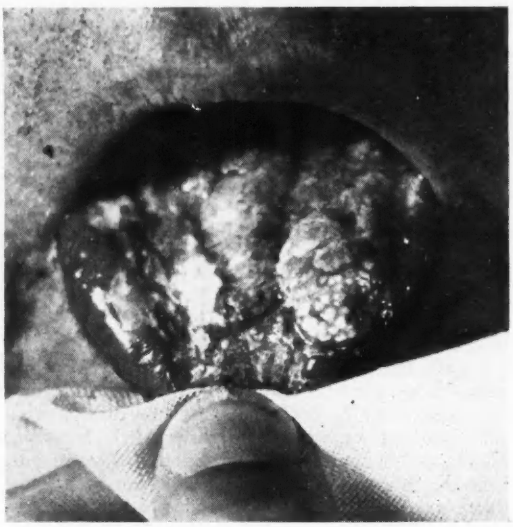


Figure 4.—*Extensive Leukoplakia with Secondary Papillomatous Growth.* The entire dorsum of the tongue is covered by leukoplakia which has caused deep, firm ridges On the left side, a papillomatous growth has developed, which is slightly elevated, irregular, and firm, but not indurated. Repeated biopsies failed to show evidence of cancer.

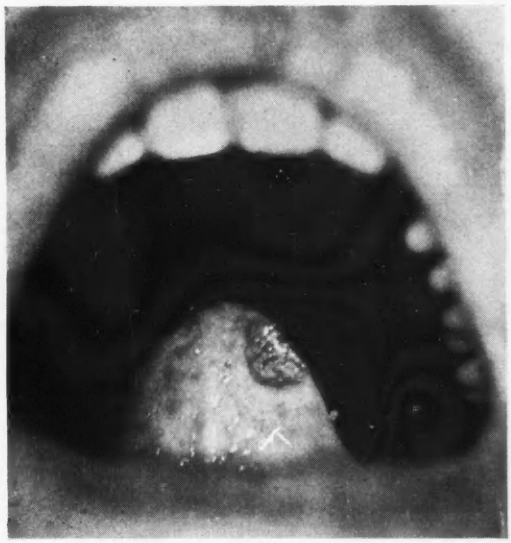


Figure 5.—*Papillary Type of Cancer, Grade I.* On the left side of the tip of the tongue, a papillary, villus-like tumor, 1.0 cm. in diameter, can be seen. The contour of the tongue has not been changed. The growth is of firm consistency, but not indurated. Apparently it has remained superficial, and no appreciable invasion of the muscularis has taken place.

on and just beneath the surface. Routine examination of the oral cavity should always include digital palpation. Any thickening, plaque, or ulcer, be it ever so small, should be considered as potentially cancerous, and immediately removed for diagnosis.

The superficial overgrowth characteristic of epidermoid carcinoma appears in one of three different forms: Papillary, nodular, or ulcerous.

A *papillary* growth suggests an early stage of the lesion. The tumor is villus-like, or ulcerated. The lesion may persist in the papillary form for months, and only moderate infiltration take place.

Nodular tumors (Figure 5), suggesting an early stage, are common on surfaces least subjected to irritation. Nodular lesions are elevated, sometimes even dome-shaped. The mucosa is smooth and has a pearly appearance. Invasion of submucosa and muscularis occurs early.

Superficial ulcers (Figures 6 and 7), either of primary origin or secondary to papillary or nodular growth appear in 80 per cent of all instances and are highly aggressive. Primary ulcers start as a small "sore spot," producing only a faint sensation of pain. Induration has to be considered as pathognomonic of cancer.

Ulcerous growths in their later stages present the appearance of a crater with indurated and rolled edges, characteristic of actively invading neoplastic tissue. (Figures 8 and 9.) Regional tenderness is invariably encountered. In far advanced cases, the sensation of pain is referred to the ear and temporal regions. Carcinomatous ulcers may at any time become secondarily infected, leading to infiltration, excavation, and metastases.

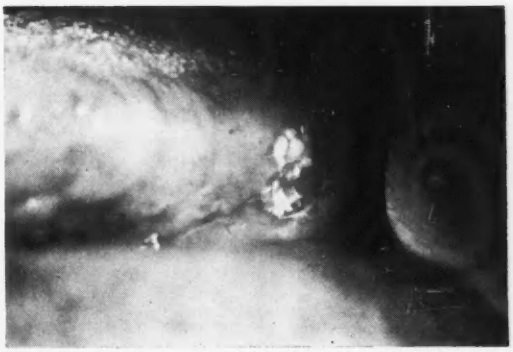


Figure 6.—*Nodular Cancer.* On the posterior third of the left border of the tongue, a triangular shaped, slightly elevated, non-ulcerated, but indurated growth, measuring 7.0 mm. in diameter, is seen. Its surface is smooth, but glistening, and there appears evidence of early invasion. This cancerous growth is due to primary injury from a sharp, jagged first molar tooth, and there is no evidence of a precancerous stage of this lesion.

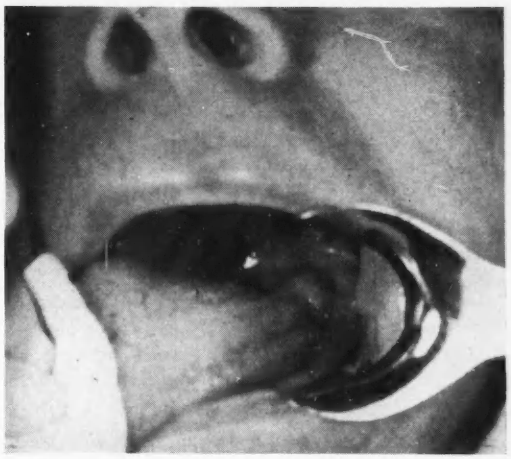


Figure 7.—*Nodular Cancer.* On the left border of the tongue, just anterior to a normal lingual tonsil, there appears a nodular, superficially ulcerated growth. The slightly dome-shaped tumor measures 1.5x1.5 cm. in diameter, while invasion in depth amounts to almost 1.0 cm.

Induration of cervical lymph nodes is always due to the presence of cancerous tissue, and indicates the existence of a primary malignant growth, almost invariably within the oral mucosa. The primary lesion is often overlooked, as it may appear as a minute, harmless-looking ulceration near the frenum, along the undersurface of the borders, or at the base of the tongue.

Histopathology: Epidermoid (squamous cell type) carcinoma is most frequently encountered (95 per cent). Other malignant lingual lesions include adenocarcinomas, and various kinds of sarcomas.

Treatment: The chances of recovery are directly related to the duration of symptoms. Treatment of primary as well as secondary lesions should therefore be started immediately.

Prophylactic oral hygiene is necessary, to check the septic condition of the mouth. While waiting for

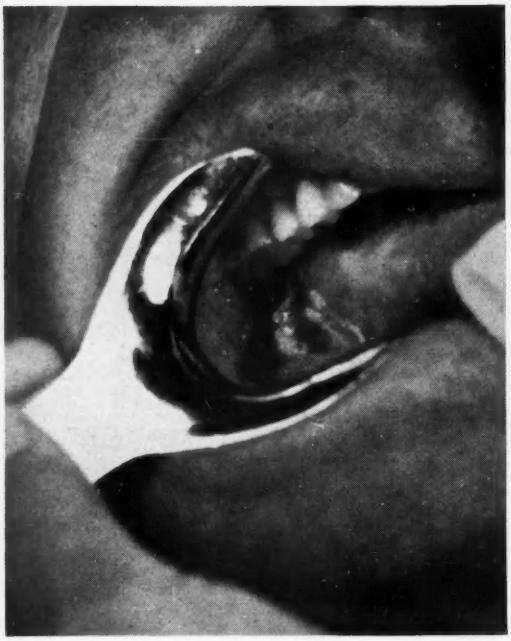


Figure 8.—*Superficial Cancer Arising on the Basis of Leukoplakia.* Along the right border of the tongue, an ulceration, 2.5x1.5 cm. in diameter is encountered. The ulcer is indurated and of irregular shape. The margin is rough and completely surrounded by moderately advanced leukoplakia. The cervical lymph nodes are not palpable, and no metastatic involvement has subsequently developed.

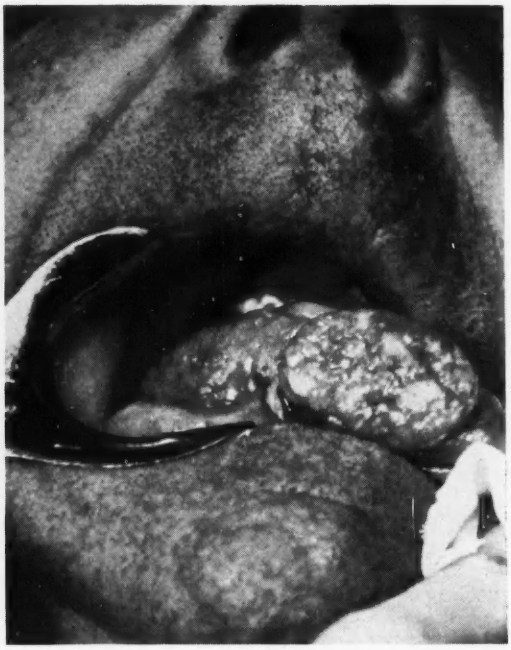


Figure 9.—*Fungating Cancer Arising on the Basis of Leukoplakia.* Along the right border of the tongue, an appears on the right border of the tongue. It is indurated, and bleeds upon slight palpation. The tumor measures 3.0x2.0 cm. in diameter, elevation above the surface of the tongue amounts to almost 1 cm., while the tongue has been infiltrated to a depth of about 1 cm. The entire lingual mucosa is covered by leukoplakia, many of the plaques are in the advanced stage, and cancer originated undoubtedly in one of these patches.

the pathologic report, treatment of the gross infection should be initiated.

Dental prophylaxis includes cleaning of the teeth, filing sharp and jagged teeth, cauterization of areas of periodontal disease, and removal of badly infected teeth. Vitamin therapy, using large doses of vitamin B complex and vitamin C, will freshen the lingual mucosa and aid the healing process.

Selection of the method for treatment of cancer of the tongue is governed by the degree of malignancy, the location and the local extent of the growth and by the presence or absence of metastases.

Treatment of the primary growth consists mainly of x-ray and radium therapy. Lesions of the tip or anterior one-third of the lateral border may be treated by wide surgical excision. Lesions at the base of the tongue are always treated with radiation. Whenever possible a peroral cone is used. It may also be necessary to supplement the x-ray therapy with either interstitial radium or radium needles. The total dosage must be calculated to destroy the cancer, yet not to inflict permanent damage to the surrounding normal cells. In 50 per cent of the cases, the primary lesion will be permanently controlled by the radiation.

In the *treatment of metastatic cervical lymph nodes,* surgical operation is the procedure of choice. Operation is feasible only under certain conditions: *The primary growth must have been unilateral, and must have been completely controlled.* The involved cervical nodes must be unilateral, and on the same side as the primary growth; they must neither be fixed, nor present evidence of spread of the malignant invasion beyond the capsule. The patient's general condition must justify the risk connected with a major surgical procedure. However, cervical lymph nodes with metastatic involvement from a primary growth at the base of the tongue are always inoperable.

A radical neck dissection consists of removal of all tissues between the platysma and the deep cervical muscles, from the ramus of the mandible to clavicle and from the border of the trapezius to the midline. The sternocleidomastoid muscle and internal jugular vein must be removed.

Whenever metastatic cervical nodes prove inoperable, roentgen therapy is supplemented by implantation of interstitial radium needles or radon seeds, into the affected lymph nodes. In very advanced cases it is ill advised to employ either surgical or radium therapy, and purely palliative x-ray treatment is indicated.

Prognosis: In an unselected series of cases, the number of five-year cures amounts to 30 per cent.

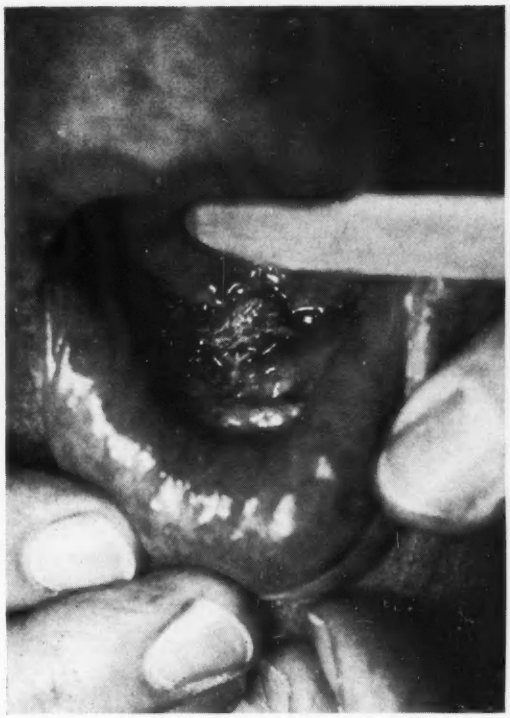


Figure 10.—*Advanced Papillary Cancer.* A papillomatous lesion, which had originated on or near the frenum, is seen on the anterior floor of the mouth. The growth has a diameter of 3.0 cm., and has completely destroyed the frenum. On both sides of the floor of the mouth, invasion has occurred; its depth, as judged by the degree of induration present amounts to 5 or 6 mm. The tongue is not infiltrated, and is still freely movable. No involvement of the cervical lymph nodes.

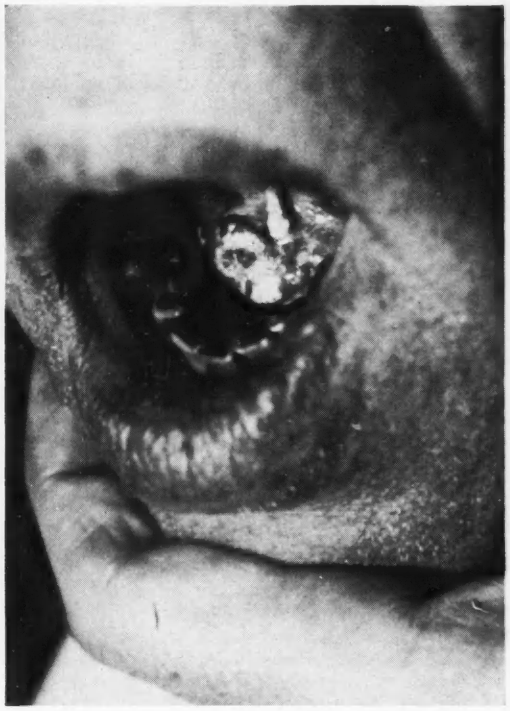


Figure 11. — *Papillary Cancer with Bulky Polypoid Overgrowth.* An oval, ulcerated growth, measuring 4.0x2.0x 1.0 cm., is seen on the anterior floor of the mouth. It originated on or near the frenum, which has been destroyed in the process. The floor of the mouth has been invaded, and the growth is fixed to the mandible. The tongue has not been infiltrated. No involvement of the cervical lymph nodes.

The chances of recovery are higher when treatment is started within two months after the appearance of symptoms. The percentage of five-year "cures" is directly related to the size of the primary growth and to its location, decreasing progressively from the tip to the base of the tongue. In the presence of metastatic involvement of the cervical lymph nodes, the prognosis is much less favorable.

CANCER OF THE FLOOR OF THE MOUTH

In no other part of the oral cavity is cancer more frequently overlooked than in the floor of the mouth. Malignant tumors in this region are usually highly aggressive, and a lump in the neck often is the first symptom. When the origin of cervical metastases proves perplexing, the involvement can frequently be traced to a minute growth in the floor of the mouth.

Clinical Characteristics: Malignant lesions in the floor of the mouth often seem highly insignificant, and resemble benign ulcers which are not uncommon in this region.

Cancer assumes one of three characteristic shapes: Ulcerous, papillary, or a bulky overgrowth. Of these, the *superficial ulcer* with rolled and indurated edges is most common. Yet, in the floor of the mouth, ulcerated tumors are less aggressive than in other parts of the oral cavity, and early invasion takes place only in the presence of constant irritation.

Papillary growths (Figure 10) are most frequently encountered at the frenum linguae, and as a rule present only slight ulceration and induration. Lesions of this type can generally be traced to malignant degeneration of benign papillomata of long standing.

Bulky growths (Figure 11) may progress to such dimensions as to displace the tongue. Such tumors are more frequent on the undersurface of the tongue than on the floor of the mouth proper.

As a rule, metastatic involvement of cervical lymph nodes occurs early; observation of the secondary growth may lead to discovery of the primary lesion. Definite diagnosis of the character of the growth, however, is possible only after microscopic examination of a tissue specimen, removed from the margin of the primary lesion.

Histopathology: Microscopically, malignant lesions in the floor of the mouth are almost always squamous cell (epidermoid) carcinoma Grade II. However, Grades III and IV are also encountered.

Treatment: The *primary growth* is preferably treated with radiation, as the mucous membrane of

the floor of the mouth responds well to this type of therapy. In the presence of only slight invasion, superficial application of radium is indicated in selected cases, using a bulky dental radium mold. Whenever the lesion is accessible, peroral roentgen therapy is indicated. If, however, tongue and anterior tonsillar pillar are also involved, this treatment has to be supplemented by interstitial radiation. In some cases surgical excision of the floor of the mouth and adjacent involved structures may be indicated.

Invasion of adjoining bone calls for surgical intervention. The operation has to include hemiglossectomy, removal of the involved parts of the floor of the mouth of the mandible, and excision of the cervical lymph nodes on the affected side.

Treatment of metastatic cervical lymph nodes proceeds generally as in the case of cancer of the tongue.

Prognosis: In an unselected series of patients with cancer of the floor of the mouth, the number of five-year "cures" amounts to about 35 per cent.

CANCER OF MUCOUS MEMBRANE OF THE CHEEKS

Cancer of the mucous membrane of the cheeks resembles more closely malignant lesions of the lips than cancer in other parts of the oral cavity. Males are about ten times as often affected as females, and the average age of patients is 62 to 65 years. Malignant lesions are most frequent in the anterior and inferior portion of the buccal mucosa.

Clinical Characteristics: Cancer of the mucous membrane of the cheeks usually assumes one of three characteristic shapes: Ulcerous, papillary, or a bulky, cauliflower-like overgrowth. *Ulcerous growths* present rolled edges and an indurated base; even in lesions which appear to be shallow, invasion has frequently extended into the muscularis.

Papillary growths are as a rule only partly ulcerated, and show little invasion in proportion to the surface area involved. The degree of malignancy is usually limited.

Bulky, cauliflower-like growths (Figure 12) are relatively rare. Outgrowth and invasion are usually of corresponding extent.

Histopathology: Malignant lesions in the buccal mucosa are almost always of the squamous cell (epidermoid) type, with differentiated cells, and formation of pearls. Malignancy of Grade II predominates.

Treatment: In lesions with a diameter of 1.0 cm. or less, surgical excision may be indicated. Growths of a larger diameter are treated with peroral roentgen ray therapy, followed by implantation of radium needles, or radon seeds.

Metastatic cervical lymph nodes are treated whenever the conditions enumerated in the section on cancer of the tongue have been fulfilled. In all other instances, only radiation is employed, combining roentgen ray therapy with implantation of radium needles, or radon seeds.

Prognosis: The incidence of serious complications from carcinoma of the buccal mucosa is not as high as in cancer elsewhere in the oral cavity. The prognosis, however, is less favorable than in cancer of the lip, and in an unselected series of cases the number of five-year "cures" amounts to about 35 per cent. When cancer is recognized early and treatment is started without delay, the result is more favorable than in any other part of the oral cavity.

CANCER OF THE GUM

All granulations, ulcerations, and elevations on the alveolar ridges must be considered cancerous until benignity is demonstrated through microscopic examination of a tissue specimen removed from the margin of the lesion. Even in the case of alveolar giant cell tumors, treatment should never be instituted without a complete microscopic study. Invasion of tooth sockets and underlying bone, as well as infection of the primary growth, occurs early in carcinoma of the gingiva.

Clinical Characteristics: Cancer of the gum is observed in two different forms: Papillary and ulcerous. In both types, the gross appearance allows an approximate estimate of the degree of malignancy. Papillary lesions are elevated and fungating (Figure 13), but extensive surface spread is combined with little invasion. Such growths do not produce pain, but their bulk and the accompanying hemorrhage will generally cause the patient to seek relief before invasion of bone has occurred. In the early stages, the tumor forms a solid, smooth, not ulcerated mass (Figure 14), or it may be of papillary appearance, and show a certain degree of ulceration. Dentures will cause rapid spread of the primary growth, as well as early metastatic involvement.

Ulcerous lesions frequently appear as simple, mucosal ulcers. Palpation, however, will demonstrate an indurated border, which has to be considered as pathognomonic. Patients usually complain about pain and soreness interfering with mastication. Invasion is invariably extensive. On the basis of roentgenographic evidence it will be found that bone involvement in early stages is confined to the alveolar ridge, while in fully developed lesions invasion of the body of maxilla or mandible has taken place.

Histopathology: Microscopically, cancer of the gum is almost uniformly of the squamous cell (epidermoid) type. However, the two clinical forms of cancer of the gum differ also in their microscopic appearance: In the papillary type, the keratotic process may progress so far as to produce leukoplakic overgrowths, with no other evidence of malignancy than the presence of well-differentiated pearls; the invasive, ulcerous type, on the other hand, produces little keratiniaztion or formation of pearls, but is characterized by less differentiated cellular elements.

Treatment: The *primary growth* is treated by surgical excision. The plan of therapy, especially the extent of the operative procedure, depends on the degree to which the bony structures have become involved. If little or no invasion has occurred, treatment consists of excision of the cancerous growth

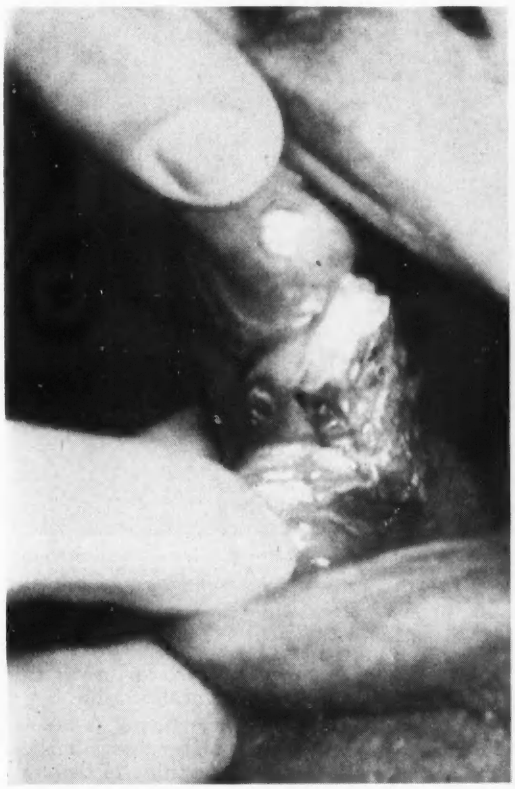


Figure 12.—*Advanced Ulcerous Cancer.* A bulky, ulcerous tumor, measuring 3.5x3.0x2.0 cm. is seen on the anterior half of the mucosa of the right cheek. The growth has infiltrated throughout the full thickness of the cheek. Recent spread to the upper and lower lip is observed. No involvement of the cervical lymph nodes.

and of the underlying bone, combined with cauterization of a wide area. If the malignant process is no longer limited to the alveolar bone, resection of the body of the mandible, or of the maxilla, is usually required. Normal function can be adequately restored through subsequent bone graft. In the case of the mandible, it is desirable to preserve the ascending ramus, and the cosmetic result will be excellent if it is possible to re-insert the digastric muscle.

The treatment of involved cervical lymph nodes consists preferably of radical neck dissection. The indications are the same as in the case of cancer of the tongue.

Prognosis: Cancer of the gum is frequently recognized by the dentist, and the number of five-year "cures," including even cases with bone involvement, amounts to approximately 35 per cent.

CANCER OF THE HARD AND SOFT PALATE

Cancer of the palate is similar to malignant involvement of other portions of the oral mucosa. Frequently it constitutes a secondary invasion from a primary growth of the gum, the tonsil, the tongue, or within a paranasal sinus. In advanced cases, however, it may be impossible to determine at which site the malignant process started.

Clinical Characteristics: Cancerous lesions of the *hard palate* have the characteristic appearance of

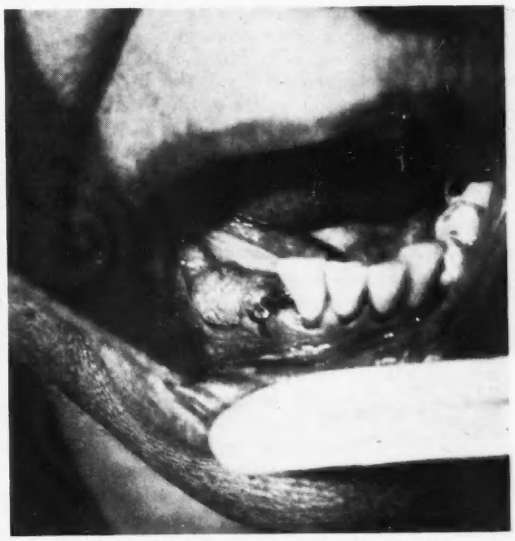


Figure 13.—*Early Cancer.* A dome-shaped, partly ulcerated growth, measuring 2.5x1.0 cm., is seen on the right lower gum. The surface is slightly nodular, and leukoplakia covers that part of the tumor which is not ulcerated. The base of the growth is surrounded by a typical rolled edge, which is indurated. The lesion is fixed to the periosteum.

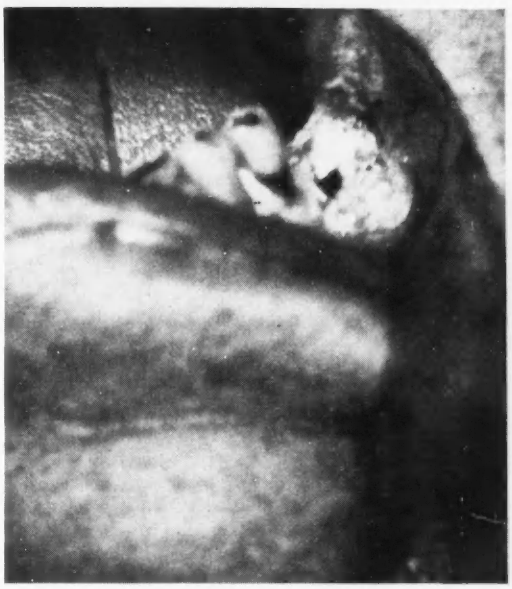


Figure 14.—*Leukoplakia with Early Cancerous Change.* The entire left lower gum is covered by advanced leukoplakia. The keratotic process is more active along the external margin, where a plaque, 1.0 cm. in diameter has developed. This plaque is abnormally firm, and a slight rolled margin appears along its posterior border. Biopsy of a specimen from this area demonstrated early squamous cell epidermoid carcinoma, Grade I. No evidence of bone invasion appeared in roentgenograms, or during operation.

superficial ulcers with indurated, rolled edges, and are commonly of a diameter of 1.0 to 2.0 cm. (Figure 15). Invasion occurs late, due to the compactness of the underlying palatine bone.

On the *soft palate*, cancerous growths appear generally as bulky tumors. Papillary lesions are, however, occasionally encountered, and combine wide surface involvement with little or no invasion in depth. In more advanced stages, the disease process spreads from the soft palate to the anterior pillars of the fauces, and from there to the tonsillar fossa, the floor of the mouth, or the base of the tongue. Not uncommonly a rounded, non-ulcerative lesion is seen, due to a tumor of a minor salivary gland.

Metastatic involvement of the cervical lymph nodes occurs late, and less frequently than after primary malignant lesions in other parts of the oral cavity.

Histopathology: Microscopically, cancer of the palate appears as squamous cell (epidermoid) carcinoma, with well-differentiated cellular elements. Malignancy of Grade II is most frequently encountered.

Treatment: The plan of treatment differs in accordance with the extent of involvement, and also with the likelihood of spread of the disease process. On the *hard palate*, early growths are destroyed through cauterization. This method is not indicated in cases with invasion in depth, as a foramen into one or both nares and antra may result. In selected cases, peroral roentgen ray therapy may be substituted. Otherwise, surgical excision is the procedure of choice; the resulting gap will subsequently have to be closed by a prosthesis.

For lesions of the *soft palate*, treatment consists preferably of peroral roentgen ray therapy, alone or in combination with interstitial radiation, using radium needles, or radon seeds.

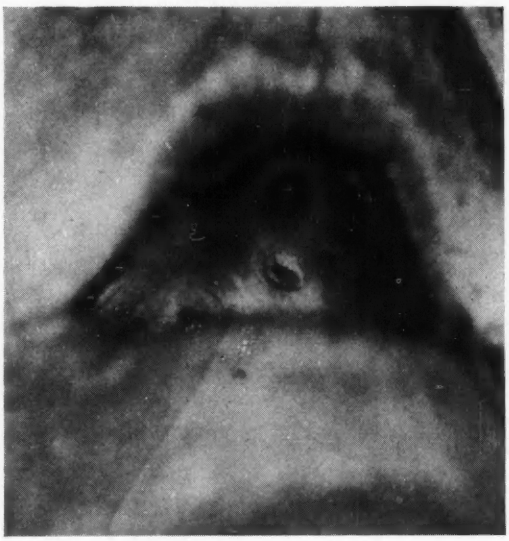


Figure 15. — *Early Cancer.* A crater-like, ulcerated growth, measuring 5.0 mm. in diameter, is seen on the left side of the hard palate. The tumor presents a granular crater with indurated, rolled edges, a characteristic sign of cancer. It is adherent to the periosteum, indicating that invasion through the submucosa has taken place.

Metastatically involved cervical lymph nodes are treated as in the case of cancer of the tongue.

Prognosis: The rate of five-year "cures" in cancer of the hard and soft palate is higher than in malignant involvement in any other portion of the oral cavity. In a series of cases, the number of five-year "cures" amounts to 40 per cent.

"Cancer of the Stomach" by H. Glenn Bell, M.D., Chapter XVIII of the California Cancer Commission Studies, will appear in this section of the July number of CALIFORNIA MEDICINE.

California MEDICINE

OWNED AND PUBLISHED BY THE CALIFORNIA MEDICAL ASSOCIATION
450 SUTTER, SAN FRANCISCO 8 PHONE DOUGLAS 2-0062

For Information on Preparation of Manuscript, See Advertising Page 2

EDITORIALS

The "Easy Bruiser" and Medical Care Plans

So many statistics have been issued and so much written on the subject of health insurance plans in England, Germany and other faraway places that most of us develop a feeling of quiet desperation when such literature reaches our desks, and treat it accordingly. Statistics can be as dull as invoices, and frequently are. However, taken as individuals, people interest physicians. It is for this very reason that most of us select medicine as a profession.

In light of that interest, what do we know about how our neighbors right here in California react to access to medical care when it is provided on a fixed prepayment basis?

As California Physicians' Service has been in existence since 1939 and now has more than half a million beneficiary members, it can be considered well beyond the pilot plant stage, and its experience therefore representative. One important revelation has been the tremendous increase in the amount of medical care sought by members immediately after they subscribe to the plan. This remarkable rise, it was thought in the early days of C.P.S., would be reversed as soon as new members had had their hernias repaired and their tonsillectomies done. Not so, however, and adjustments in the plan became necessary.

It seems to be human nature to want to get "money's worth" out of anything that is paid for in anticipation of need, and this sometimes means that a few in whom this urge is more than ordinarily aggressive get much more service than others, although all pay equally. In California Physicians' Service (and there is no reason to believe it is different with other plans for anticipating medical care costs) there have been times when a mere 10 per cent of the beneficiaries used a full 40 per cent of the funds paid in by all members. Because such people, aptly designated "easy bruisers," ran to the doctor with all sorts of minor ailments and complaints, only a little more than half the funds remained to care for the other 90 per cent of beneficiary members.

Any plan that makes it easier to call a physician out at night to deliver an aspirin, because it is easier than going to the drug store and costs less, is likely to be abused. As a possible solution to such abuses, the two-visit deductible plan was evolved on the theory that, while an employed patient could pay for the first two visits without hardship, the "easy bruiser" would be given pause and the funds paid in by all beneficiaries thereby protected.

Other beneficiaries who get considerably more than a pro rata share of service are the "thick history" patients. Knowing that the bills are to be paid from funds to which many others as well as they themselves contribute, they go from doctor to doctor, and their diagnoses change with their symptoms.

Some patients seem to believe that the plan owes them much more than a reasonable share. One woman complained bitterly about the three-month limitation of services which is provided in the C.P.S. contract.

A three-month limitation is designed to eliminate inordinate claims by a relatively few individuals upon funds contributed by the entire membership. Patients with long and disabling illnesses, such as tuberculosis and osteomyelitis, who normally are taken care of by public institutions after the original diagnosis is made, are thus likewise eliminated.

In any plan such as that offered by C.P.S., constant vigilance is necessary to prevent some patients (and, we admit with regret, some doctors, too) from taking an unreasonable share of available funds. Fortunately, since C.P.S. is our own plan, we do not have to appeal to politicians or to a government bureau, or even to a private insurance company, to make adjustments that will provide a reasonable balance in the distribution of medical care among the members who have paid for it.

CALIFORNIA MEDICAL ASSOCIATION

E. VINCENT ASKEY, M.D.....President
R. STANLEY KNEESHAW.....President-Elect
LEWIS A. ALESEN, M.D.....Speaker
DONALD A. CHARNOCK, M.D.....Vice-Speaker
EDWIN L. BRUCK, M.D.....Council Chairman
L. HENRY GARLAND, M.D.....Secretary-Treasurer
SIDNEY J. SHIPMAN, M.D.....Chairman, Executive Committee
DWIGHT L. WILBUR, M.D.....Editor
JOHN HUNTON.....Executive Secretary

NOTICES AND REPORTS

C.M.A. Postgraduate Seminar Program Receives Added Impetus From Annual Convention of C.M.A.

1. *Postgraduate Activities Committee Conference.*

A conference of the deans and representatives from the five medical schools, the C.M.A. Cancer Commission, the Heart and Tuberculosis Association, and state and county medical societies was held Tuesday, April 13, at the invitation of the C.M.A. Postgraduate Activities Committee.

John C. Ruddock, M.D., chairman of the Postgraduate Activities Committee, outlined the present program of one-day seminars to be offered to physicians practicing in the vicinities of 15 selected towns outside the teaching centers. It was stressed that the Committee wishes to coordinate and assist all existing postgraduate programs functioning at present and to present programs which will be practical and, insofar as possible, on subjects chosen by the physicians who are to attend the seminars.

All those attending the conference commended the basic idea although there was a variety of opinions as to details. The question of stimulating and maintaining interest in the seminars received much discussion. It was generally agreed that success depended upon promoting the interest of the local physician and county societies by direct and repeated contacts to assist in planning as well as producing the programs. The consensus was that the desire of the participating physician is for "streamlined, practical presentation." It was pointed out in this respect that academic and technical papers and theoretical approaches with extensive statistics and slides of complicated formulae "usually put 75 per cent of the audience to sleep." There was agreement that proper correlation of the various groups and interests can develop an excellent and much needed program.

2. *Special Session on Postgraduate Education.*

Three papers pertaining to this subject were read at the Special Session on Postgraduate Medical Education Wednesday afternoon, April 14. George F. Lull, M.D., secretary and general manager of the A.M.A., presented the information available from the Council on Medical Education and Hospitals of the A.M.A. His closing remarks: "It would appear that more state societies are taking definite steps to insure that a continuing program of postgraduate training is made available to the physicians in their states. . . . They are in a position to mobilize all educational personnel and facilities in the state; if necessary they can bring in teachers from other states without difficulty; and they usually have means for giving effective publicity to the courses that are offered. . . . Most state societies . . . assign the responsibility . . . to a committee [of physicians] who have a real interest in postgraduate education and whose training and experience qualify them for this work."

Ward Darley, M.D., Dean of the University of Colorado School of Medicine, described the graduate and postgraduate training program developed recently in Colorado. He emphasized the timeliness of re-evaluating the aims of medical education and medical service. This position is based on the premises that (1) there is an imbalance in distribution of medical care and physicians due to concentration in larger towns and to a disproportion between specialists and general practitioners and (2) the "depersonalization" of medical practice.

The University of Colorado has recently inaugurated a department of general practice and has revised the course of study "to present medicine as human biology . . . stressing the importance of preventive medicine . . . of diagnosis . . . of recognizing their [the doctors'] limitations and calling for special consultation for the patient's best welfare . . . prevention of disability and chronicity . . . and the value of good rehabilitation . . . and continuing medical care of the ambulatory patient." Graduate training for general practice consists of a two-year internship together with an optional three-year residency. Two to two and one-half years is spent at the University Hospital. The remaining years are to be spent in approved, rural hospitals under supervision of the University department of graduate and postgraduate education.

The University's postgraduate program is now arranged at the request of local, regional and special groups, and individuals are taken as observation students in specialty clinics. Dr. Darley reported that psychosomatic medicine is a particularly popular subject.

Dr. Darley stressed that "the general practitioner should be the core of our medical care . . . qualified to diagnose and treat the patient, referring him to a specialist only occasionally when the situation requires it. . . . The scientific side of medicine has become so foremost that the physician has lost sight of the humanistic and socialistic (not political) sides of his work in the community. . . . It is important that he realize the problems in his community and attempt to solve them."

In a paper on "The New Postgraduate Program of the C.M.A." Carroll B. Andrews, M.D., director of the program, said that in California there are approximately 2,750 physicians (about 30 per cent of the total C.M.A. membership) practicing in areas not easily accessible to the medical teaching centers. It is for them that the present seminar program is designed. Fifteen towns in outlying sections of the state have been designated as centers for the seminars. Tentative full day programs to cover the various subjects in medicine, surgery and specialties are being developed. The material is to be presented on a practical basis for a full-day program by combining ward rounds, clinical conferences, motion pictures, panel discussions and lectures. Every effort is being made to correlate and coordinate the seminar program with the existing postgraduate courses and symposia of the medical schools, specialty groups and hospitals throughout the state. Effort will be required to encourage the development of local postgraduate study groups to fill the interim between seminars. "The successful perpetuation of this extensive program necessarily rests with the proper coordination and utilization of the Postgraduate Committee organization by the individual physicians, the component county societies and the entire body of organized medicine in California," Dr. Andrews said.

3. *Announcement.*

A seminar arranged by the C.M.A. Postgraduate Committee will be held in Santa Rosa, Friday, June 18, 1948, at the Sonoma County Hospital. The subject: "Benign Gastro-Entero-Colic Diseases." The faculty will consist of an internist, a surgeon and a radiologist. Physicians from Sonoma, Marin, Napa, Mendocino and Lake counties are expected to attend.

Minutes of Council Meetings

TENTATIVE DRAFT OF THE MINUTES OF THE 349TH, 350TH, 351ST, 352ND AND 353RD MEETINGS OF THE COUNCIL OF THE CALIFORNIA MEDICAL ASSOCIATION

349th Meeting

The 349th meeting was called to order by Chairman Edwin L. Bruck in Room 210, St. Francis Hotel, San Francisco, at 10 a.m., Saturday, April 10, 1948.

1. *Roll Call:*

Present were President Cline, President-Elect Askey, Speaker Alesen, Vice-Speaker Charnock, Councilors Bruck, Shipman, Ball, Crane, Henderson, Anderson, Kneeshaw, Lum, MacDonald, Green, Cherry, MacLean, Hoffman, Bailey, and Thompson, Secretary Garland, Editor Wilbur.

Present by invitation were Dr. George F. Lull, Secretary and General Manager of the American Medical Association; John Hunton, Executive Secretary; Howard Hassard, Legal Counsel; William P. Wheeler, Assistant Executive Secretary; Clem Whitaker, Public Relations Counsel; Edward Clancy, assistant to Mr. Whitaker; Dr. Dwight H. Murray, Chairman of Public Policy and Legislation; Ben H. Read, Executive Secretary of the Public Health League of California; county society executive secretaries Frank Kihm of San Francisco, Rollen Waterson of Alameda, Joseph Donovan of Santa Clara and Stanley K. Cochems of Los Angeles. Present by invitation during a part of the meeting were Doctors A. E. Moore, Donald Cass, Robertson Ward, J. Frank Doughty and A. M. Meads, all members of the Board of Trustees of California Physicians' Service.

A quorum present and acting.

2. *Approval of Minutes:*

On motion duly made and seconded, minutes of the 348th meeting of the Council, held February 21-22, 1948, were approved.

3. *Membership:*

(a) A report of membership as of April 8, 1948, was received.

(b) On motion duly made and seconded, three (3) members whose 1947 dues had been received since the last previous Council meeting, were voted reinstatement.

(d) On motion duly made and seconded in each case, 14 applicants were elected to Associate Membership. These were:

Eli R. Movitt, Alameda County.
Kenneth W. Haworth, Humboldt County.
Fremont E. Davis, Kern County.
Joseph Maschmeyer, Kern County.
Richard G. Soutar, Sacramento County.
Olive Pippy, San Joaquin County.
Helen Tepper, San Luis Obispo County.
David M. Caldwell, Santa Barbara County.

Percy G. Hamlin, Santa Barbara County.
S. B. Bellinger, Santa Clara County.
E. J. Finnerty, Sonoma County.
Henrietta Frederickson, Sonoma County.
Lida P. Longnecker, Sonoma County.
Josephine Williams, Sonoma County.

(e) On motion duly made and seconded in each case, 10 applicants were elected to Retired Membership. These were:

J. Emmett Clark, Alameda County.
G. H. Armen, Los Angeles County.
Thomas H. Barlow, Los Angeles County.
Joseph M. Berauer, Los Angeles County.
Jesse D. Cook, Los Angeles County.
Norman A. Leake, Los Angeles County.
Ralph A. Woods, Los Angeles County.
James B. Herring, Orange County.
Henry A. Beaudoux, Santa Clara County.
Mark F. Hopkins, Santa Clara County.

(f) On motion duly made and seconded, C. M. Holmes-Brazelton of Alameda County was elected to Life Membership.

A motion was duly made and seconded that Charles A. James of Fresno County be elected to Life Membership. Motion lost. No affirmative votes.

A motion was duly made and seconded that John D. Morgan of Fresno County be elected to Life Membership. Motion lost. No affirmative votes.

On motion duly made and seconded, C. Max Anderson of Los Angeles County was elected to Life Membership.

On motion duly made and seconded, Francis L. Anton of Los Angeles County was elected to Life Membership.

On motion duly made and seconded, Irving R. Bancroft of Los Angeles County was elected to Life Membership.

On motion duly made and seconded, C. W. Bonynge of Los Angeles County was elected to Life Membership.

A motion was duly made and seconded that Rafe C. Chaffin of Los Angeles County be elected to Life Membership. Motion lost. No affirmative votes.

A motion was duly made and seconded that E. G. Eisen of Los Angeles County be elected to Life Membership. Motion lost. No affirmative votes.

On motion duly made and seconded, L. J. Huff of Los Angeles County was elected to Life Membership.

On motion duly made and seconded, J. W. Kelley of Los Angeles County was elected to Life Membership.

On motion duly made and seconded, J. J. Klick of Sacramento County was elected to Life Membership.

A motion was duly made and seconded that Deon A. Crew of San Luis Obispo County be elected to Life Membership. Motion lost. No affirmative votes.

A motion was duly made and seconded that Martin G. Carter of Los Angeles County be elected to Life Membership. After discussion, it was regularly moved and seconded that the motion be tabled until the next meeting. Motion carried.

On motion duly made and seconded, Packard Thurber of Los Angeles County, who failed of election to Life Membership at the 348th Council meeting, was elected to Life Membership.

A letter from an attorney, written in behalf of Harold M. F. Behneman, an applicant for Life Membership who failed of election at the 348th Council meeting, was considered and on motion duly made and seconded, it was voted that a reply be sent, outlining the interpretation by the Council of Article IV, Section 1(e) of the Constitution, under which the applicant failed to receive sufficient affirmative votes to attain Life Membership.

4. *Financial:*

(a) A report of bank balances as of April 8, 1948, was received.

(b) A report of receipts and expenditures for March and for the nine months ended March 30, 1948, was received and ordered filed.

(c) A balance sheet as of March 31, 1948, was received and ordered filed.

(d) The Executive Secretary reported that $10,000 par value U. S. Treasury Bonds had been retired by call and that $25,000 par value U. S. Treasury 2½ per cent bonds of 1972-1967 had been purchased with these and other available funds of the Trustees of the California Medical Association.

5. *Present Selective Service Proposals:*

The Executive Secretary read a telegram received from the Council on Emergency Medical Service of the American Medical Association, calling attention to a proposed bill in the U. S. Senate to provide for the drafting of physicians under Selective Service. He also reported on a telephone message from Mr. James J. Boyle, Washington representative of The United Public Health League, which indicated that the proposed Senate bill was much more restrictive than a parallel proposed before the Armed Services Committee of the House of Representatives and that the latter proposal appeared to be finding more favor in Congress than the Senate proposal.

On motion duly made and seconded, it was voted that messages be sent to the Armed Services Committee of both houses of Congress and to all California Congressmen, outlining the Association's disapproval of the proposed Senate bill.

6. *Public Relations:*

Mr. Clem Whitaker, public relations counsel, reported that expenditures in the 1947-1948 fiscal year for public relations activities were estimated to amount to about $155,000, or $35,000 less than the $190,000 budget voted for this work for that period.

7. *Committee on Committee Appointments:*

The Chairman appointed Doctors Lum (chairman), MacDonald and Bailey to review the membership of the Standing Committees and to bring in recommendations for appointments needed to fill vacancies.

8. *Legal Department:*

Mr. Hassard called the Council's attention to a Constitutional amendment which would be called up

for a vote by the House of Delegates at this session, in which authority would be granted, if the amendment were passed, to permit the House of Delegates to establish the level of fees to be paid by applicants for life membership. After discussion, it was regularly moved, seconded and voted that the Council add to its report to the House of Delegates the recommendation that this Constitutional amendment, if adopted, carry with it the approval of the House of Delegates that fees for life membership applicants between the ages of 50 and 60 years of age be set at ten times the annual active membership dues, for applicants over 60 but less than 65 years of age at seven times the annual active dues, for applicants over 65 but less than 70 years of age at three and one-half times the annual active membership dues and for applicants over 70 years of age, no fee would be required.

Mr. Hassard also called attention to a pending Constitutional amendment which would permit the reduction of dues for special classifications of membership and pointed out that this amendment, if adopted, would require authorization by the House of Delegates to fix the annual dues for such cases. It was regularly moved, seconded and voted that the Council suggest to the House of Delegates that authority to fix reduced dues for such additional classifications of membership be delegated to the Council.

Mr. Hassard called attention to a third pending Constitutional amendment which would provide for the establishment of classifications of membership for undergraduate students, interns, residents and House officers, and pointed out that this amendment, if adopted, would require the working out of details to govern the rights, privileges and dues of such members. On motion duly made and seconded, it was voted that the Council suggest to the House of Delegates that a reference committee of the House of Delegates be appointed to study this matter and to work out the details for such membership classifications for application in the event the proposed Constitutional amendment were adopted.

9. *California Physicians' Service:*

Dr. C. L. Cooley, Secretary, and Mr. William M. Bowman, Executive Director of C.P.S., reported that for the 11 months ended February 29, 1948, C.P.S. had received a gross income of $11,400,000, that its bank balances on February 29, 1948, totaled $1,009,000 and that its Unit Stabilization Fund (surplus) on the same date was $162,501. Membership as of April 1, 1948, was more than 537,000.

Mr. Bowman stated that the Board of Trustees had approved the principle of individual contracts for self-employers or for groups of less than five people and such contracts should be ready for presentation within 60 days. He also reported that C.P.S. is working on a plan under which indigent patients in Santa Barbara County would be taken care of under a C.P.S. contract and that plans for this purpose, to apply in Santa Barbara and elsewhere, were expected to be completed soon.

10. *New Mexico Physicians' Service:*

Discussion was had on the loan made to New Mexico Physicians' Service, the reasons for it, the duration and the anticipated repayment beyond the $500 previously received and reported. It was regularly moved, seconded and voted that an item outlining these factors be prepared as an addition to the report of the Council to the House of Delegates.

11. *Preparation of Manual on Joint Dysfunction:*

Dr. Packard Thurber appeared before the Council and outlined his earlier proposal that the Association recognize his proposed preparation of a manual to standardize the terminology and evaluation of cases of joint dysfunction in industrial injury cases. He pointed to the value of such a manual to the entire profession and stated his belief that no individual member should proceed in this task unless he had some official support by the profession of the state. After discussion it was regularly moved, seconded and voted that this matter be referred to the Standing Committee on Industrial Practice and that this committee be granted authority to appoint a subcommittee to undertake this project.

12. *Blood Bank Commission:*

Dr. Bruck announced that the Blood Bank Commission would meet during the Annual Session. Dr. Green reported that he had attended a meeting of the A.M.A. Blood Bank Committee, of which he is a member, that this committee had studied all phases of the American National Red Cross blood bank program and had reported to the A.M.A. Board of Trustees but was not yet prepared to report to the profession pending action by the A.M.A. Trustees.

13. *State Department of Public Health:*

Dr. Bruck reported on a meeting of the committee established by the State Department of Public Health to study the proposed chronic disease program. He also reported on a proposed study of chronic alcoholism, and on motion duly made and seconded, it was voted that the Council recommend to the House of Delegates the establishment of a committee to study chronic alcoholism, such committee to include representatives of the Association, of the State Department of Public Health, and of church, labor and agricultural groups.

On motion by Shipman, seconded by Green, it was voted that the Executive Committee be empowered to meet with the State Director of Public Health in an effort to establish an approved boundary line between public health functions and the private practice of medicine, the Executive Committee to report back to the Council.

14. *California Medicine:*

Mr. Hunton presented a set of principles adopted by the Advertising Committee to govern the acceptance of advertising of products not approved by the various Councils of the American Medical Association and on motion duly made and seconded, these principles were approved. At the request of the Ad-

vertising Committee, it was regularly moved, seconded and voted that additional members be appointed to this committee from the Southern California area, for either active membership or for consultation.

15. *Addenda to Report of the Council:*

(a) On motion duly made and seconded, the Council voted to accept as an addition to its report to the House of Delegates a statement incorporating the fees for life membership mentioned in Item 8, above.

(b) On motion duly made and seconded, it was voted to accept as an addition to the report of the Council a statement submitted by Doctor Askey relative to New Mexico Physicians' Service.

(c) On motion duly made and seconded, a proposed By-Law amendment covering membership where residence and principal place of practice are different (Chapter II, Section 9(c)) was approved as an addition to the report of the Council.

(d) On motion duly made and seconded a resolution to memorialize the House of Delegates of the American Medical Association to work for a better utilization of medical officers in the event of future armed conflicts, was adopted as an addition to the report of the Council.

(e) On motion duly made and seconded, it was voted to add to the report of the Council a proposed By-Law amendment to require members who transfer their offices from one county to another to maintain membership in the county society into which area they move. (Chapter II, Section 10.)

(f) On motion duly made and seconded, it was voted to add to the report of the Council a proposed By-Law amendment to require the naming of an additional Reference Committee by the House of Delegates, to consider financial reports, budgets and the level of Association dues.

(These additions to the report of the Council appear verbatim in the transcript of the first meeting of the House of Delegates, 1948 Annual Session.)

16. *Time and Place of Next Meeting:*

It was agreed to meet at 7:40 a.m., Sunday, April 11, 1948, in Room 220, St. Francis Hotel, for the 350th meeting of the Council.

EDWIN L. BRUCK, M.D., *Chairman*
L. HENRY GARLAND, M.D., *Secretary*

350th Meeting

The 350th meeting was called to order by the Chairman at 7:30 a.m. in Room 220, St. Francis Hotel, San Francisco, Sunday, April 11, 1948.

1. *Roll Call:*

Present were President Cline, President-Elect Askey, Speaker Alesen, Vice-Speaker Charnock, Councilors Bruck, Shipman, Ball, Crane, Henderson, Anderson, Kneeshaw, Lum, MacDonald, Green, Cherry, MacLean, Hoffman and Thompson. Secretary Garland and Editor Wilbur. Present by invitation were Dr. George F. Lull, Secretary of the American Medical Association; Dr. D. H. Murray, Chairman of Public Policy and Legislation; Executive Secretary Hunton; Legal Counsel Hassard; Public Relations Counsel Whitaker; Mr. Ed Clancy, assistant to Mr. Whitaker, and Mr. Ben H. Read, Executive Secretary of the Public Health League of California.

A quorum present and acting.

2. *California Society for Crippled Children:*

The Chairman reported on conferences which had been held with representatives of the California Society for Crippled Children, which had previously sought approval of the Council for a proposed clinic program for epileptics. It was regularly moved, seconded and voted that a committee be appointed to study this matter and report back to the Council during this annual session.

3. *Public Policy and Legislation:*

Dr. Murray and Mr. Read reported on the current legislative outlook and pointed out that the 1948 budget session of the State Legislature had defeated in committee a proposed constitutional amendment which would have placed before the voters a proposal to establish a system of state-operated health insurance. They also pointed to the importance of the medical profession's taking an interest in the coming elections of 80 Assemblymen, 20 Senators and 23 members of Congress.

4. *Addenda to Council Report:*

The Chairman read the addenda to the report of the Council to the House of Delegates (appearing in full in the transcript of the House of Delegates) and it was regularly moved, seconded and voted that these addenda be approved and presented to the House of Delegates.

5. *Los Angeles Office for California Medical Association:*

Discussion was had concerning advisability of the Association's maintaining a branch office in Los Angeles for the use of the executive secretary, legal counsel, advertising representative and other officers or employees. The executive secretary, in response to questions, stated that such an office could be maintained at a moderate expense and would be useful in the work of the office staff and other representatives of the Association. It was regularly moved, seconded and voted that a branch office of the Association be opened in Los Angeles.

EDWIN L. BRUCK, M.D., *Chairman*
L. HENRY GARLAND, M.D., *Secretary*

351st Meeting

The 351st meeting was called to order by the Chairman at 7:30 a.m. in Room 220, St. Francis Hotel, San Francisco, Monday, April 12, 1948.

1. *Roll Call:*

Present were President Cline, President-Elect Askey, Speaker Alesen, Vice-Speaker Charnock,

Councilors Bruck, Shipman, Ball, Crane, Henderson, Anderson, Kneeshaw, Lum, MacDonald, Green, Cherry, MacLean, Hoffman, Bailey and Thompson, Secretary Garland and Editor Wilbur.

Present by invitation were Dr. George F. Lull, Secretary of the American Medical Association; Executive Secretary Hunton, Legal Counsel Hassard, Dr. Dwight H. Murray, Chairman of Public Policy and Legislation; Mr. Ben Read, Executive Secretary of the Public Health League of California, and County Executive Secretaries Joseph Donovan of Santa Clara and Kenneth C. Young of San Diego.

A quorum present and acting.

2. *Association of Santa Fe Coast Line Physicians:*

Dr. Paul Tully, representing the Association of Santa Fe Coast Line Physicians, reviewed the situation in which his association finds itself in dealing with the directors of the Santa Fe Hospital Association in Los Angeles. Doctors Murray and Lull participated in the discussion, particularly in connection with the relationship of the hospital to the Council on Medical Education and Hospitals of the A.M.A., and Mr. Hassard told of the legal steps taken to date to assist the physicians. After discussion, it was regularly moved, seconded and voted that Doctors Askey, Alesen and Bailey should prepare a letter to be sent to the Santa Fe Hospital Association and that Doctor Askey appoint a committee to meet with the Santa Fe physicians and report back to the Council.

3. *Cancer Commission:*

Dr. Lyell C. Kinney, Chairman of the Cancer Commission, discussed the problems arising out of cases referred to established Tumor Boards by osteopaths and chiropractors. The Cancer Commission wished the advice of the Council in such cases, particularly as to whether such cases might be handled by the Tumor Boards and referred back to their referring osteopath or chiropractor; also, in the case of osteopaths, should the Tumor Board permit the osteopath to accompany the patient to the Tumor Board?

After discussion, it was regularly moved, seconded and voted that the Council could not go on record as approving osteopathic participation in the activities of Tumor Boards, particularly since these boards are considered a part of the staffs of hospitals. It was also voted that chiropractors should receive no standing in the activities of these boards.

4. *Budget for 1948-1949 Fiscal Year:*

Dr. Shipman, Chairman of the Auditing Committee, presented a proposed budget for the fiscal year starting July 1, 1948. This was discussed, item by item. As a part of the budget the Council adopted the proposed budget of public relations counsel, calling for the expenditure of $146,000, granted an increase from $1,000 to $2,000 for illustrations for CALIFORNIA MEDICINE, and approved an allotment of $4,500 for additional expenses of the legal department. In considering estimated income for the fiscal year, discussion was had on the level of dues to be recommended to the House of Delegates for the 1949 calendar year, and it was regularly moved, seconded and voted that 1949 dues be recommended to the House of Delegates at $50 for active members. Doctors Cherry and Thompson were recorded as voting against this recommendation.

On motion regularly made and seconded, the proposed budget for the 1948-1949 fiscal year was approved as amended and ordered reproduced for distribution to the members of the House of Delegates.

5. *Meeting Place for 1949:*

Invitations from Los Angeles, Palm Springs and Santa Cruz were presented for consideration in selecting a meeting place for 1949. After discussion it was regularly moved, seconded and voted that Los Angeles be the site of the 1949 Annual Session. It was further voted that the Executive Secretary during the coming year review the meeting facilities of all potential meeting places in order to ascertain if such facilities could handle the Association's Annual Session.

6. *Shearon Legislative Service:*

A request was presented that copies of the legislative bulletin service issued by Dr. Marjorie Shearon in Washington be made available to the deans of the medical schools in California. It was agreed that several copies of each weekly issue be sent to the deans out of the quantity available to the Association under its present subscription arrangement.

7. *Retirement Program for Association Employees:*

Dr. Charnock reported on the study made by his committee on proposed retirement pension plans for Association employees. After discussion, it was regularly moved, seconded and voted that a retirement plan be instituted on an insurance basis at an initial cost of somewhat over $2,000 to cover employees with five or more years of service and to add those who reach five years of employment at a later date, it being understood that Doctor Charnock's committee should select the insurance carrier.

8. *Member of Fifty Years' Standing:*

On motion duly made and seconded, it was voted that members who had maintained membership in the Association for fifty years or more should be given special recognition and emblems to signify such membership.

9. *Stanislaus County Medical Society:*

A letter to the Council from officers and members of the Stanislaus County Medical Society, stating the loyalty of the members of the society to the Association, was discussed and it was regularly moved, seconded and voted that a reply be sent, thanking these members for their resolution and expressing appreciation for their expression of loyalty.

EDWIN L. BRUCK, M.D., *Chairman*
L. HENRY GARLAND, M.D., *Secretary*

352nd Meeting

The 352nd meeting was called to order by the Chairman at 7:30 a.m. in Room 220, St. Francis Hotel, San Francisco, Tuesday, April 13, 1948.

1. *Roll Call:*

Present were President Cline, President-Elect Askey, Speaker Alesen, Vice-Speaker Charnock, Councilors Bruck, Shipman, Ball, Crane, Henderson, Anderson, Kneeshaw, Lum, MacDonald, Green, Cherry, MacLean, Hoffman, Bailey and Thompson, Secretary Garland and Editor Wilbur.

Present by invitation were Dr. George F. Lull, Secretary of the American Medical Association; Executive Secretary Hunton; Legal Counsel Hassard; Dr. Dwight H. Murray, Chairman of Public Policy and Legislation; Mr. Ben H. Read, Executive Secretary of the Public Health League of California, and county society executive secretaries Joseph Donovan of Santa Clara and Kenneth C. Young of San Diego.

A quorum present and acting.

2. *Palo Alto Clinic:*

Mr. Hassard was asked to report on his study of the contract proposed by the Palo Alto Clinic for execution with the Menlo School and Junior College, under which medical care would be provided for students of the schools by physicians in the immediate vicinity under an arrangement whereby the Palo Alto Clinic would assume charge of collecting funds and paying all participating physicians. Approval in principle of this contract had previously been expressed by both the Santa Clara County and San Mateo County Medical Societies.

On motion duly made and seconded, it was voted that the sense of the Council be that the contract be approved but that attention be called to the fact that financial details were lacking or meagerly covered in the contract and that such details were a matter of prime concern to those who proposed to provide the service. The Executive Committee was authorized to approve this contract *if* it is satisfactory to the county medical societies involved.

3. *Appointments to Standing Committees:*

Dr. Lum presented the nominations made by his special committee for appointments to Standing Committees and it was duly moved, seconded and voted that these appointments be approved and presented as a report to the House of Delegates.

4. *Committee on Industrial Health:*

The Chairman announced the appointment of members to the Committee on Industrial Health, which had previously been approved by the Council as a special committee. Chairman of this committee is Dr. Christopher Leggo of Contra Costa County, and members are Doctors A. B. Carson of Alameda County and Louis D. Cheney of Los Angeles County. These appointments were confirmed by the Council.

5. *Blood Bank Commission:*

The Chairman announced appointments to the Blood Bank Commission. Dr. John R. Upton of San Francisco was named as chairman and the following as members of the commission: DeWitt Burnham of San Francisco, George F. Paap of Long Beach, E. R. Evans of Los Angeles, Dudley Saeltzer of Sacramento, Malcolm Merrill of the State Department of Public Health, John W. Green of Vallejo, Donald Harrington of Stockton, John O. Eccleston of Stockton, C. E. Bates of the American Legion, K. Howorth of Eureka, W. H. Geistweit, Jr., of San Diego, E. D. Sorsky of Fresno, R. G. Frey of Red Bluff, E. Richmond Ware of Los Angeles and Gerald K. Ridge of Ventura.

Adjournment.

EDWIN L. BRUCK, M.D., *Chairman*
L. HENRY GARLAND, M.D., *Secretary*

353rd Meeting

The 353rd meeting was called to order by Chairman Bruck at 8 a.m., Wednesday, April 14, 1948, in Room 220, St. Francis Hotel, San Francisco.

1. *Roll Call:*

Present were President Askey, President-Elect Kneeshaw, Speaker Alesen, Vice-Speaker Charnock, Councilors Bruck, Shipman, Ball, Crane, Henderson, Anderson, Lum, Green, Cherry, MacLean, Hoffman, Bailey, and Thompson, Secretary Garland and Editor Wilbur. New Councilors present: Hartzell Ray, Fifth District, and Wayne Pollock, Eighth District.

Present by invitation were Dr. Dwight H. Murray, Chairman of Public Policy and Legislation; Mr. Ben Read, Executive Secretary of the Public Health League of California; Executive Secretary Hunton, Legal Counsel Hassard. Present by special invitation was Dr. John W. Cline, immediate past president.

A quorum present and acting.

2. *Organization of Council:*

Chairman Bruck assumed the Chair in the absence of a chairman for the newly constituted Council.

On nomination made and seconded, Dr. Edwin L. Bruck was unanimously elected Chairman of the Council.

On nomination made and seconded, Dr. Sidney J. Shipman was unanimously elected Vice-Chairman of the Council.

On motion duly made and seconded, Dr. Dwight L. Wilbur was unanimously appointed Editor of CALIFORNIA MEDICINE.

On motion duly made and seconded, Dr. L. Henry Garland was unanimously appointed Secretary-Treasurer.

On motion duly made and seconded, Peart, Baraty & Hassard were unanimously retained as legal counsel.

3. *Appointment of Auditing Committee:*

The Chairman announced the appointment of the Auditing Committee for the ensuing year, to consist

of Sidney J. Shipman as Chairman, H. Gordon MacLean and Donald D. Lum.

4. *Farewell of Outgoing President:*

Dr. Cline made his farewell to the Council, offered his thanks for the help given him by all Councilors and wished the best for his successor.

5. *Executive Session:*

On motion duly made and seconded, the Council went into executive session. Dr. Garland expressed his thanks to the Council for renaming him as Secretary-Treasurer but expressed doubt as to his ability to devote to this work the time he felt necessary to do justice to the position. In view of other demands upon his time (teaching clinical radiology, officer of the Radiological Society of North America, etc.) he asked permission to tender his resignation. After discussion, it was moved, seconded and unanimously voted that Dr. Garland's resignation be accepted with regret, with the understanding that he would continue to serve as Secretary-Treasurer until a successor should be named.

At this point the Council rose from executive session.

6. *California School Health Conference:*

Dr. Anderson reported on a school health conference sponsored by the State Department of Education, which he had attended as an Association representative. A full report of the conference is to be furnished to Dr. Anderson when available and thus made available to the Council.

7. *Time and Place of Next Meeting:*

It was agreed to hold the next Council meeting in Los Angeles on June 5 and 6, 1948.

Adjournment.

EDWIN L. BRUCK, M.D., *Chairman*
L. HENRY GARLAND, M.D., *Secretary*

C.M.A. House of Delegates Proceedings

FIRST MEETING OF THE 45th ANNUAL SESSION
San Francisco, Sunday, April 11, 1948

The first meeting of the House of Delegates of the California Medical Association convened in the Empire Room, Sir Francis Drake Hotel, San Francisco, California, at 7:00 o'clock p.m., Speaker L. A. Alesen presiding.

SPEAKER ALESEN: Will the House of Delegates please come to order. Would you gentlemen in the rear please be seated?

The Chair recognizes Dr. O. R. Myers of Humboldt County, chairman of the Committee on Credentials. Dr. Myers, have you a quorum in the house?

DR. MYERS: Mr. Speaker, we have registered 128 duly qualified delegates in the House of Delegates.

SPEAKER ALESEN: Thank you. A motion is in order to accept the report of the Credentials Committee as constituted in this House at this time.

(Motion was made, seconded and carried to accept the report of the Committee on Credentials.)

SPEAKER ALESEN: The House of Delegates is duly constituted. As has been the custom, we will dispense with the roll-call at the first meeting of the session.

In accordance with the constitution, the following reference committees have been appointed:

Committee on Credentials: O. R. Myers, of Humboldt County, chairman; J. E. Young of Fresno County; Neill Johnson of San Joaquin County.

Reference Committee No. 1, on the reports of Officers, Standing and Special Committees: Benjamin Frees of Los Angeles County, chairman; J. Frank Doughty of San Joaquin County; J. Needham Martin, San Bernardino County.

Reference Committee No. 2, report of the Council, report of the Secretary-Treasurer, report of the Executive Secretary: William G. Donald of Alameda County, chairman; Frank Reardon of Sacramento County; F. Powers Heald of Imperial County.

Reference Committee No. 3, resolutions, amendments to the Constitution and By-Laws, and new and miscellaneous business: Robertson Ward of San Francisco County, chairman; Frank F. Schade of Los Angeles County; Francis E. Jacobs of San Diego County.

If the House has no objections, these committees will stand and function as appointed.

There has been a little change in the agenda—the order of business as published in your Pre-Convention Bulletin. The council had set aside this time for us to have some remarks from the Secretary and General Manager of the American Medical Association. Certainly, ladies and gentlemen of the House of Delegates, we need make no introduction of the man who is about to address you. Dr. Lull has conferred upon us a great honor by coming from Chicago to be with us at this time. It is a pleasure to welcome Dr. George Lull, secretary and general manager of the American Medical Association. (Applause.)

DR. GEORGE LULL: Mr. Speaker, Members of the House of Delegates of the California Medical Association, and guests.

I appreciate having received an invitation to visit the annual meeting of the California State Medical Association. As I remarked at the general meeting this morning, my contacts with the California Medical Association are with your officers and with your very able representatives in our House of Delegates.

I know all of them, as I have not only come in contact with them since my being employed as Secretary and General Manager, but previous to this, when I was a member of the National House of Delegates as the delegate from the Army.

I have visited a great many state societies since I have assumed the office of Secretary and General Manager. I have not yet reached that point of "savoir faire" where I am not surprised by anything, because all of these organizations are somewhat different.

Speaking of "savoir faire," you have probably read the story about the definition of "savoir faire." Three Frenchmen were talking to an American G.I. in Paris, and during the conversation the G.I. said, "There is a term which we sometimes use in English, and I would like to know the exact meaning of 'savoir faire'." The first Frenchman said, "Well, you see, it is this way: If you come home and you find a strange man kissing your wife, you tip your hat and say, 'Excuse me.' That is savoir faire." Frenchman No. 2 said, "No, no, Jacques, you are wrong. If you come home and see a strange man kissing your wife and you tip your hat and say, 'Excuse me, continue,' that is savoir faire." The third Frenchman said, "You are both wrong. If you find a strange man kissing your wife and you say, 'Excuse me, please continue,' and he can do it, *he* has savoir faire."

So I have not yet reached that point.

As you all know, these are times in the history of organized medicine in the United States when we have serious things ahead of us. It is a time that calls for unity of action, because unity of action shows strength.

This morning in the address of your very able president—the address was a gem as far as presidential addresses are concerned—the fact was brought home to me that we have one victory won against political domination of our profession. But this victory is not a total victory; it simply places us in a position where we are fighting not necessarily a delaying action, but, having won one fight, we await another attack. And that attack will surely come, because any move to collectivize our system of government will start with an attempt to collectivize the medical profession. There are many bills before Congress at the present time which would tend to do this. The Wagner-Murray-Dingell bill may be dead for this session, but it is not dead and buried for keeps. The Taft bill is another bill which, as you know, the American Medical Association approved in principle only. As a matter of fact, if you read the bill, you will wonder how any provisions of the bill are going to be carried out; but it was necessary to introduce a bill which would be opposed to the Wagner-Murray-Dingell Bill.

The fact that one of the bills introduced in Congress calls for a Department of Health, Education and Social Security, with a cabinet officer to head it, is significant. We do not feel that the bill will pass, because I don't think a Republican Congress would stand for the appointment of another Democrat as a cabinet officer. It is a stand-off. However, this will loom up again, we believe. It has the backing of certain Republicans.

As you know, your national House of Delegates went on record as far back as 1886 as being in favor of a Department of Health, with a cabinet officer at the head of it. However, they never contemplated including education, nor certainly the Federal Social Security Group which would be in along with these other two, health and education.

I sat in on some of the hearings conducted unofficially on this bill. We opposed it because of the reasons stated. One time while giving a talk at a meeting of some social workers, I was asked by Albert Deutsch, of *P.M.*, why the American Medical Association opposed having health considered by the Government as being of cabinet rank. I replied that we did not oppose the health affairs of the country being placed in a department of cabinet rank, and that in fact, we did not very seriously oppose having a Department of Education as our bed-fellow; but we did not want to be involved with any of the social security group, because if the social security group were to be a part of a governmental department, it would plan to dominate it. I have already seen that group's plans; the social security set-up would be the top level component all the way through, and the health and education would be simply small compartments down in the corner.

I don't want to take up the time of this House by rambling on, except to tell you that we hope to keep a somewhat closer liaison with the state medical associations and keep informed of your doings here. That was my thought a year ago when I started the "Secretary's Letter." I wanted to let people know about the little things that were happening in headquarters. There were lots of things going on there; there are many things you never hear about until your delegates go to your annual meeting. We want to keep the field informed of some of the smaller things that may be relatively unimportant in themselves, but, taken collectively, are of importance and interest to all of you people who are interested in organized medicine. And all those who are here tonight are interested in organized medicine.

I want to repeat that I appreciate being invited out here to be with you for this meeting. Thank you very much. (Applause.)

SPEAKER ALESEN: Thank you, Dr. Lull.

It is a bit like carrying coals to Newcastle to introduce the next speaker of this House of Delegates, Dr. John W. Cline, president of the California Medical Association. (Applause.)

DR. CLINE: Mr. Speaker, Members of the House of Delegates, I took the time of the general meeting this morning to speak most of the things I had in my mind. There is also in the published program the report of the President, so at this time I shall not take further time to speak before the House of Delegates. Thank you very much. (Applause.)

SPEAKER ALESEN: We shall now proceed to the reports. First, the report of the Chairman of the Council, by Dr. Edwin L. Bruck, chairman.

DR. BRUCK: Mr. Speaker and Members of the House of Delegates, the report of the Council is published in the Pre-Convention Bulletin on pages 9, 10 and 11, and I am sure many or most of you have already read it. Since that report was written there have been certain addenda, which I will now read to you.

In the first item, the Council calls to your attention that one of the constitutional amendments to be voted on at this session, referring to the reduction of membership dues during temporary illness, postgraduate study, or the earlier years of a physician's practice, if adopted, would require a designation, either by the House itself, or by delegation of authority to the Council, of the amount of the reduction and the procedure for obtaining same. The Council recommends that such authority be delegated to the Council by the House of Delegates, so that changing conditions may be taken into consideration from year to year.

Second, another constitutional amendment pending before the House of Delegates permits limited membership to qualified undergraduate students, interns, residents and house officers. This amendment is worded in such a way that it is not self-operative, and the House of Delegates must implement it by determining the qualifications, duration, dues (if any) and privileges of such limited memberships.

Third, in 1941 the House of Delegates amended the constitution to provide for a new class of membership, called "Life Membership." The amendment specified that life members should be elected by the Council on recommendation of any County Component Society, from active members in good standing who had reached a certain age and who had been members for a certain minimum number of years. The fee for life membership was fixed in the amendment at $150 for those between 50 and 60 at the time of application, $100 for those between 60 and 65, $50 for those between 65 and 70, and nothing for those over 70. When this amendment was adopted, the annual California Medical Association dues averaged about $15 a year, and the dues for some years varied between $10 and $20. The authors of the life membership amendment calculated this $150 for those between 50 and 60 as approximately ten times the average annual dues, and the fee of $100 for those between 60 and 65 as about seven times the average annual dues, and for those between 65 and 70 as between three and four times the average annual dues.

Unfortunately, the constitutional amendment did not give the House of Delegates any authority to change the life membership fee, but instead froze into the constitution the fixed amounts of $150, $100 and $50 for the various age groups. This was unquestionably an oversight at the time; due, no doubt, to the fact that no one then thought that California Medical Association dues would ever increase substantially over the then $20 per year peak. No one in 1941 could foresee that in 1945 a popular governor, elected on a non-partisan basis, would team up with left-wing elements and incorporate as his major proposal in his annual message to the Legislature a demand that California embark on a compulsory health insurance scheme. No one could foretell in 1941 that in 1945 and in the following years, the medical profession would be engaged in a life or death struggle to prevent government medicine. As you know, this happened, and it became necessary for the protection of every doctor in this state, against ultimate reduction to the status of a government-paid doctor, that the California Medical Association increase its dues.

Because the life membership fee was frozen into the constitution, it could not be increased by the House of Delegates when annual dues were increased. This left a loop-hole through which active members over 50 years of age could, by recommendation of their county society and by election by the Council, avoid bearing their proper pro rata share of the cost of fighting government medicine.

During 1945, 1946 and a part of 1947, practically no members of this association, except those who, through physical incapacity or maturity of years, had reached the end of their productive days, applied for life membership. Up to January 1, 1947, only nine doctors had applied for life membership out of over 8,000 members of this association, hundreds of whom, by age and length of membership were technically qualified. When the heat was on, the medical profession solidly fought the battle and paid the cost. At the 1947 annual session this Council, feeling that a fixed life-time membership fee in the constitution was inequitable and unjust, sponsored an amendment to the life membership provision to permit the House of Delegates, from year to year, to increase or decrease the life membership fee as current conditions might warrant. This amendment is before you this session for action.

While the amendment, designed to permit the House of Delegates to fix the life membership fee on the basis of current conditions, has been lying on the table, the Council has received applications for life membership from a number of active members in several counties in the state who are still in their producer years and who are not, to the knowledge of the Council, unable to pay their just share of the cost of protecting the independence of medicine. As a matter of fairness to the individual, the Council felt that to grant life memberships to physicians who happen to be over 50 would be inequitable and most unjust to physicians under 50, on whom could be cast the full task of bearing medicine's load. In considering this problem, the Council requested the interpretation of legal counsel of the Association as to the procedure to be followed in electing life members. The legal counsel's opinion was that the Council must act upon each application for life membership submitted to it; also that under the phrase, "Life members shall be elected by the Council," the action of the Council had to be by a regular process of election; that to be elected, an applicant had to receive at least one more affirmative vote than negative votes, and that the election had to be by the

Council and the problem could not be avoided or transferred to the House of Delegates or to any other body of this Association.

Following this procedure the Council has conducted an election with respect to every applicant for life membership, and each councilor has voted according to his own conscience. Many of the applicants for life membership have received favorable votes and have been elected. Some applicants have not been elected. The Council has received official protests from two county societies because of its failure to elect some of these applicants. The Council believes that it acted in each instance in accordance with the best interests of medicine, and that in good conscience, the only honorable action under the circumstances was to preserve the equality of burden on all active members of the Association.

At the same time, the Council recognizes the undesirability of the present inflexible life membership fees contained in the constitution, and urges the House of Delegates to consider carefully the amendment now pending before it. If the amendment is adopted, then the House of Delegates is urged to exercise its power under the new amendment to reset, from year to year, the life membership fee. In this connection the Council recommends that if the pending constitutional amendment is adopted, the House of Delegates, at the second meeting of this session, to be held on April 13, fix the life membership fee for those members elected to life membership during the ensuing year at ten times the amount of the annual dues for 1948 for those applicants over 50 and under 60 years of age, seven times the 1948 annual dues for those applicants from 60 to 65 years of age, and three and one half times the 1948 annual dues for those applicants 65 to 70 years of age. It is further recommended that life membership fees so fixed be applicable to all applicants voted upon by the Council at any time from the adjournment of the House of Delegates at this session to the adjournment of the House of Delegates at the 1949 annual session; and that in the 1949 annual session, life membership fees again be set for the following year by the House of Delegates.

Section No. 4. There have been requests for information regarding the status of the loan of money to the New Mexico Physician's Service. Misunderstandings apparently have been held regarding this matter. At the time that the California Medical Association was most precariously engaged in efforts to combat socialized medicine in our Legislature, and at the same time attempting to develop public relations with a view to establishing prepaid voluntary plans on a firm basis, the California Medical Association Council was approached by representatives of the New Mexico Physician's Service. They stated that they were in the process of contracting with groups in New Mexico. If these groups were obtained, the success of the plan would be assured. However, to do this, the groups demanded evidence that the New Mexico Physician's Service would be able to fulfill the contract. A limited amount of money was necessary to guarantee this. If this money was not available at once, it was felt, the whole movement would fail. It was the feeling of the Council that failure of that plan at that strategic time would react disastrously to the interests of our fight against socialized medicine in California. It was therefore decided to loan money to carry them through the emergency as a protective measure as viewed from our California standpoint. The California Medical Association sent its Executive Secretary to survey the situation and determine if the facts were as presented to us. His report confirmed the need. Thereupon funds were loaned on notes received from the New Mexico Physician's Service, on a limited basis. Since that time they have repaid part of the loan, and there is every indication that all the money will be repaid in full, inasmuch as they are now operating in the black and apparently on a firm basis.

The loan of this money, viewed purely as a public relations and policy measure in the interests of the California Medical Association following the direction of the House of Delegates, we believe, was money well loaned. Since the money is being repaid, it will be a valuable service which we will have received at no actual expense. California Physicians' Service had nothing to do with this and never advanced any money to the project. Nor did it instigate the action.

As of April 30, 1948, no more money is committed by the California Medical Association. The total amount loaned was $18,000, and this loan is now at an end.

Item No. 4. The Council has continued to review the official journal, CALIFORNIA MEDICINE, and has approved a stringent set of rules and standards which will serve as criteria for the acceptance of all advertising in the journal. The Council believes that the application of these standards will give CALIFORNIA MEDICINE a standard of advertising content second to none and in keeping with the high professional standard of medicine in California.

Item No. 6. At the suggestion of the Executive Secretary, the Council has under advisement, pending further study and information, the establishment of a branch office of the California Medical Association in Los Angeles.

Item No. 7. The Council has studied various other problems, for which it has prepared resolutions to be presented to this House of Delegates. These resolutions will be presented at the proper time for the introduction of new business.

SPEAKER ALESEN: The report of the Council will be referred to Reference Committee No. 2. Next is the report of the Trustees of the California Medical Association, by Dr. John W. Cline, President.

DR. CLINE: There is no report in addition to that published in the Pre-Convention Bulletin, Mr. Speaker.

SPEAKER ALESEN: Next will be the report of the Auditing Committee by Dr. Shipman, the chairman.

DR. SHIPMAN: No additional report.

SPEAKER ALESEN: These reports will be forwarded to the proper reference committee. The report of the Executive Secretary, Mr. John Hunton.

MR. HUNTON: No additional report, Mr. Speaker.

SPEAKER ALESEN: The report of the Secretary, Dr. L. Henry Garland.

DR. GARLAND: I have no additional report.

SPEAKER ALESEN: We shall proceed further to the report of the Editor, Dr. Dwight L. Wilbur.

DR. WILBUR: No additional report, Mr. Speaker.

SPEAKER ALESEN: The reports of the District Councilors. District No. 1; Dr. Ball, do you have a report?

DR. JOHN D. BALL: No additional report.

SPEAKER ALESEN: District No. 2; Dr. Crane.

DR. JAY J. CRANE: No additional report.

SPEAKER ALESEN: District No. 3; Dr. Henderson?

DR. HARRY E. HENDERSON: No additional report.

SPEAKER ALESEN: Dr. Anderson, District No. 4.

DR. AXCEL E. ANDERSON: No additional report, Mr. Speaker.

SPEAKER ALESEN: District No. 5, Dr. Kneeshaw.

DR. R. STANLEY KNEESHAW: No additional report.

SPEAKER ALESEN: District No. 6; Dr. Bruck.

DR. EDWIN L. BRUCK: No additional report.

SPEAKER ALESEN: District No. 7, Dr. Lum.

DR. DONALD D. LUM: No report.

SPEAKER ALESEN: District No. 8, Dr. MacDonald.

DR. FRANK A. MACDONALD: No additional report.

SPEAKER ALESEN: District No. 9, Dr. Green.

DR. JOHN W. GREEN: No additional report.

SPEAKER ALESEN: And the Councilors-at-Large, Dr. Cherry?

DR. WALTER S. CHERRY: No additional report.

SPEAKER ALESEN: Dr. MacLean?

DR. H. GORDON MACLEAN: No additional report.

SPEAKER ALESEN: Dr. Hoffman?

DR. EUGENE F. HOFFMAN: No additional report.

SPEAKER ALESEN: Dr. Shipman?

DR. SIDNEY J. SHIPMAN: No additional report.

SPEAKER ALESEN: Dr. Bailey? (No response.)

SPEAKER ALESEN: Dr. C. V. Thompson?

DR. C. V. THOMPSON: No report in addition to that already published.

SPEAKER ALESEN: Now at this time we will have the reports of the Standing Committees. First the Executive Committee. Dr. Shipman?

DR. SIDNEY J. SHIPMAN: No additional report.

SPEAKER ALESEN: And the report of the legal counsel, Mr. Hassard.

MR. HOWARD HASSARD: I will break the continuity, Mr. Speaker; I have a supplemental report.

Mr. Speaker and Members of the House of Delegates, our report in the Pre-Convention Bulletin omits several specific activities of the legal department, for the reason that the activities concerned ought not to be discussed beyond the confines of the Association, and the Pre-Convention Bulletin is a published record available to the public at large. The matters withheld from our printed report should, however, be submitted to you, and I will therefore review those phases of our work during the past year.

First, practice in county hospitals. Last summer the District Attorney of Sonoma County requested the opinion of the Attorney General as to whether a County Board of Supervisors could legally restrict professional practice in a county hospital to physicians licensed by the Board of Medical Examiners. Some weeks later the Attorney General handed me an opinion prepared by three of his deputies and submitted to him for his approval, in which it was flatly and without qualification stated that as a matter of law each county hospital must be open to all practitioners licensed in the state, regardless of the type of license held.

The Attorney General withheld his approval of this opinion, and we submitted to him a detailed brief showing that in other states, courts have held that a public hospital, as well as a private hospital, may limit its staff to doctors of medicine, and even further, may limit its staff as prescribed by the standards of the American Medical Association or the American College of Surgeons.

In October of last year the Attorney General issued his formal opinion, holding that the supervisors of a county may limit, by ordinance or rule, the practitioners permitted to treat patients in a county hospital and may so limit county hospital practice to doctors of medicine. When borne in mind that the Attorney General's office has fifty or more deputies and that opinions are mass-produced by various state deputies and officials, it is extremely gratifying that the medical profession has a friend occupying the office of Attorney General in this state. Otherwise, without our knowledge and without recourse, the standards of practice in public hospitals would have been imperiled and perhaps forever lowered. Osteopaths and chiropractors could have used the opinion to force themselves into the public hospitals. The next drive would have been for legislation giving them like privilege in private hospitals.

Second, hospital construction and government gifts.

As you know, in 1946 Congress enacted the Hill-Burton bill, which provides for gifts of federal money to the states to finance construction of public hospitals and voluntary, non-profit, private hospitals. The federal law limits such gifts to a maximum of one-third of the cost of construction. The federal law also specifies that no money shall be available to any hospital unless it is open to all persons, regardless of race, color or creed, and unless it "provides a community service."

In 1947 Governor Warren sponsored and the

California Legislature adopted a state law matching the federal one-third with state funds, but limited to public hospitals. Private, non-profit hospitals are excluded from state aid, because the state constitution prohibits gifts of state money for private purposes, and the Governor opposed a constitutional amendment to change this restriction.

It had been assumed by the Department of Public Health and by our office and by others that county hospitals were ineligible for either federal or state gifts, because they are limited to the care of indigent and emergency cases, and hence do not furnish a community service. However, the Supervisors' Association in this state urged both the Federal Public Health Service and the State Department of Public Health to approve construction gifts to counties and to bolster its claim for funds, the Supervisors' Association informally asked the Attorney General's office for a ruling. Accordingly, the Director of Public Health, early in February, wrote to the Attorney General's office in San Francisco, asking for a decision. During February an informal letter was sent from the Attorney General's office, and an informal letter does not require the approval of the Attorney General in person. This letter was written to the Director of Public Health, and I quote a portion of it:

"While county hospitals have in the past usually furnished hospitalization only to indigent and emergency cases, we find no inhibition or restriction to a county's providing hospitalization for a community service which is a general non-discriminatory service to those in need of hospitalization, without respect to the ability of the person seeking services to pay a part or the whole of the value thereof."

This informal letter was forwarded to Washington and immediately the United States Public Health Service replied, stating that on the basis of the letter from the Attorney General's office, county hospitals in California are considered by the United States Public Health Service to be unrestricted, to furnish service to the community as a whole, and therefore eligible for federal funds.

As will be noted, the letter in question, although in the form of an opinion, did not go through the regular procedure required of a formal opinion. The California Medical Association was not advised while it was under preparation. We found out about it immediately after its issuance and filed a vigorous protest with the Attorney General. We have asked for a conference with him and one has been arranged during the coming week.

In our judgment it is vitally important, in the interests of the medical profession, that county hospitals not be permitted, by the back-door route of federal handouts, to convert from their long-established status as hospitals for the indigent to community hospitals serving all of the public and competing directly with private, non-profit hospitals. The California Medical Association has fought for years to prevent legislation in this state that would open the county hospitals to all persons regardless of ability to pay. We have always won that battle. Now there is a chance of losing the war by indirect action from Washington. It is perfectly obvious that if county hospitals are built with federal and state funds on the basis that they render a community service, they will ever thereafter be open to all persons regardless of ability to pay and any effort to restrict them to the indigent will be met by the bland statement, "We can't be blamed, because we took the money to build the hospital on the condition we render a community service."

Further, the fact that the matching state aid is only available to public hospitals means that a county hospital will be able to get two-thirds of its needed construction costs from the federal and state governments; while a voluntary, non-profit hospital in the same area can only get one-third—that is, the federal portion. Thus the erecting of buildings for state medicine would be financed two-thirds by the taxpayers' money. We assure you that we will do our utmost to secure a reversal of the informal letter and of the decision of the United States Public Health Service. But the active help of all members of the Association may well be necessary before the controversy is settled.

Third, the Hospital Tax Exemption Law. In 1944 the People adopted a constitutional amendment permitting real property tax exemptions for non-profit hospitals with the provision that the requirements for exemption be determined by the Legislature. In 1945 the Legislature enacted rules for obtaining tax exemption, including the following:

"When the services and expenses of the hospital, including salaries, are excessive, based upon like services and salaries in comparable institutions."

We believe that the Legislature, in providing for a comparison of expense and salaries in private hospitals with public institutions, intended a comparison of such things as hospital executive salaries, food costs, janitor services, and so forth, and did not intend to restrict professional services. However, the State Board of Equalization and the various county assessors, in administrating the legislative act, have taken the position that the comparison must be made for all services performed in a hospital, including radiologist, pathologist, etc. The situation is confusing. In some areas hospitals have readily obtained exemption and in other areas exemption has been limited or denied, where there is really no difference in the facts involved. In some instances, if professional services rendered in the hospital have been compensated at a greater rate than like services in public institutions, requested exemption has been denied. This situation is dangerous and could lead to further control of hospitals over medical services.

The Council has directed that our office devote our efforts toward remedying the condition if possible. We have held conferences with the representatives of the Association of California Hospitals and believe that the best remedy is to urge the Legislature next January to repeal the particular provision that is causing the trouble, or failing outright appeal, to secure an amendment limiting the comparison between private and public institutions to non-professional services.

Four, recent malpractice cases. Two recent malpractice problems are of state-wide interest and concern. The first arose in San Diego County. Some months ago an osteopathic surgeon, in an osteopathic hospital, performed a cesarean section. The patient did not do well, and a few months later went to a physician, who, after considerable examination, operated upon her, but without apparent improvement. Two or three months after this operation, she went to another physician, who secured an x-ray of her abdomen, which disclosed the presence of a surgical sponge. He operated, removed the sponge, which was rolled up like a napkin, and inserted in a metal ring. The patient died. The case came to the attention of the district attorney, who seriously considered filing a manslaughter information against the osteopathic surgeon and others. At the request of the County Society, Dr. Regan, counsel for the Los Angeles County Medical Association and I went to San Diego and conferred with the district attorney. We endeavored to convince the district attorney that a manslaughter proceeding, regardless of the merits of this particular case, would jeopardize all surgery everywhere, because if it was once established in law that a bad result from surgery could subject the surgeon to a manslaughter charge, all surgery would involve too great a percentage risk, and the public would be the ultimate sufferer. The district attorney decided to submit the matter to the grand jury. The grand jury did not return an indictment, but did recommend legislation making it mandatory in all hospitals to have x-rays taken of every patient after major surgery. From discussion with the district attorney, I know that he is serious about it and intends to press the recommendation of the grand jury at the next session of the Legislature. Seriously, the California Medical Association will have to have a policy to present to the Legislature on the subject, because whether we wish it or not, the subject will be presented by the district attorney, I am sure, from discussions with him. He thinks that he has an idea that will end all chances of a foreign body remaining after surgery.

The other case that I desire to call to your attention is this: One of the District Courts of Appeal in this state held that the failure of a physician to take x-rays of a woman who fell on a sidewalk and complained of great pain in the region of her hips constituted negligence as a matter of judicial knowledge, and hence the woman was not required to produce any expert testimony to support her action against the doctor. In this case it was later discovered that she had suffered a fractured hip. The Court said, and I quote:

"It is evident in the present case that when plaintiff fell, a possible fracture was indicated, and it is likewise apparent that it is a matter of common knowledge, of which the trial Court should have taken judicial notice, that the ordinary physician of good standing in his community, in the exercise of ordinary care, would have had x-ray pictures taken of the plaintiff's body when a fracture might have resulted from the fall."

This last case, along with the threatened manslaughter case in San Diego County, illustrate the degree to which the courts of law have departed from the original common-law rule that a physician is not a guarantor of cures; and the original common-law rule that negligence in medical practice can only be proven by the expert testimony of persons skilled in medical practice. The courts, and most enforcement officers, are inching backwards to the ancient concept of an eye for an eye. First the courts held, years ago, that in the case of x-ray and other burns, the burden of proof was upon the physician to prove that he was not negligent. Then the courts held that in the event of a foreign body remaining after surgery, the burden of proof was on the surgeon to prove that he did not leave it through negligence. Next follows the concept—luckily not prosecuted—that, as in the case in San Diego, that death following the leaving of a foreign body in the abdominal cavity could constitute criminal manslaughter. Then follows the notion that a judge and jury can, without proof or evidence of any kind, assume as a matter of common knowledge that failure to take x-rays is bad medical practice; in other words, that laymen may determine without aid from experts what constitutes good medical practice. We do not presume to know the answer; but we definitely feel that unless the trend of the courts towards imposing upon physicians the liability of a guarantor or warrantor is halted and reversed, the time may come when the practice of medicine and surgery is so dangerous to the practitioner, that self-protection, rather than the welfare of the patient, will of necessity be the first thought in every physician's mind. Greater efforts must be made by the profession in this state to drive home to the public that holding physicians to the dogma of "an eye for an eye" will, in the long run, stop all progress in medicine and reduce medical care to a pussy-footing, cautious activity, in which, as in some government bureaus, personal protection comes first and the job to be done a poor second.

I hope that I have not taken too much of your time. I have limited myself to those matters now before us which we believed were of sufficient importance that they should be presented to you at this time. Thank you. (Applause.)

SPEAKER ALESEN: The report of the Legal Counsel has been referred to Committee No. 1.

The report of the Committee on Associated Societies and Technical Groups; Dr. Peter Blong, do you have an additional report?

DR. PETER BLONG: No additional report.

SPEAKER ALESEN: The Committee on Audits. Dr. Shipman, do you have any additional report?

DR. SIDNEY J. SHIPMAN: No.

SPEAKER ALESEN: The Committee on Health and Public Instructions, Dr. George M. Uhl.

(No response.)

SPEAKER ALESEN: The Committee on History and Obituaries; Dr. Morton Gibbons. Is Dr. Gibbons in the house?

(No response.)

SPEAKER ALESEN: The Committee on Hospitals, Dispensaries and Clinics; Dr. Andrews, chairman.

DR. CARROLL B. ANDREWS: No additional report.

SPEAKER ALESEN: The Committee on Industrial Practice; Dr. Donald Cass.

DR. DONALD CASS: Since our report was made, the Committee has been studying the review of the report of the Industrial Accident Commission. I had hoped we would be able to present a committee schedule tonight, or, through the Council of the California Medical Association; but because these things are slow going through committees and individuals, our schedule is not ready.

We have also been approached by the nurses of the state to bring a resolution before this House that nursing service in industry shall follow the rules of the standing orders for nurses as laid down by the American Medical Association; but on the advice of our legal counsel, the Committee on Industrial Practice has postponed, or laid on the table, any such resolution, because we have been informed that it is not the privilege or the pleasure of this organization, the California Medical Association, to pull the chestnuts out of the fire for the nursing association. So we have not pushed that particular matter. We do not have a resolution prepared for this House regarding industrial nursing.

The Committee is very active, and is working hard on this schedule at the present time.

SPEAKER ALESEN: The Committee on Medical Defense; Dr. Nelson Howard, chairman.

(No response.)

SPEAKER ALESEN: Committee on Medical Economics; Dr. H. Gordon MacLean.

(No response.)

SPEAKER ALESEN: Committee on Medical Education and Medical Institutions; Dr. B. O. Raulston.

(No response.)

SPEAKER ALESEN: Committee on Organization and Membership; Dr. Mulfinger.

DR. CARL L. MULFINGER: No additional report.

SPEAKER ALESEN: Committee on Postgraduate Activities; Dr. Ruddock.

DR. JOHN C. RUDDOCK: I have no additional report at this time.

SPEAKER ALESEN: Committee on Publications; Dr. George W. Walker.

(No response.)

SPEAKER ALESEN: Committee on Medical Economics; Dr. H. Gordon MacLean.

DR. MACLEAN: Mr. Speaker and Members of the House of Delegates, this is the final report of the Committee on Medical Economics of the California Medical Association. I can assure you I am not going to read all of that (displaying); I am only going to read just the first few pages of it.

The preliminary report of the Committee was given in the Pre-Convention reports, published in the March number of CALIFORNIA MEDICINE. The Committee carried out the studies outlined therein on prepayment health insurance plans, individual physician-patient economic relations, and presents the following information:

There is increasing public demand for prepaid medical and hospital care. A voluntary system is presently favored over the government compulsory sickness insurance, but the social planners continue their activities. Doctors in the hospitals must vigorously develop sound non-profit, voluntary medical service for the medium and low-income groups.

Blue Cross has proven it is possible to provide adequate hospital service for these groups of employed workers and their dependents. This has been accomplished by following sound insurance principles and good administrative procedures. Pioneer plans made many mistakes and had financial difficulties. These have disappeared with experience. Participating hospitals underwrite most of these plans, but hospitals must be given a fair return. In spite of rising hospital costs, premiums have been kept within the public's ability to pay.

The Blue Cross Commission coordinates the plans and gathers and distributes statistics and voluminous procedures and administrative practices. This fund of information is invaluable.

Enrollment of individual workers has been experimented with but it has been necessary to raise premiums and restrict benefits.

There are now some 30,000,000 Blue Cross subscribers and 1,991 Blue Cross groups in the United States, Canada and Puerto Rico.

Medical care plans started later, without previous experience, and they made many mistakes. These are being eliminated and sound insurance principles, enrollment procedures and administrative methods have been developed. It has now been determined that medical care for serious illness, sometimes called catastrophic, can now be offered to medium and low-income groups, and at a price they can afford to pay. I would like to mention that there is some difference of opinion as to what "catastrophic" means. Some believe that it means the long-continued case, but as a matter of fact most descriptions given of serious illness employ the term "catastrophic." This includes surgical and obstetrical plus limited medical care, and also some anesthesia, x-ray and laboratory; all are a part. Doctors can be paid fair fees for care given these groups.

Some plans have been experimenting with medical, surgical and obstetrical care outside of the hospital, and these must of course necessarily be limited. It may prove costly, but should be cautiously carried out in order to obtain further experience. It is interesting to note that early comprehensive insurance was not eagerly bought by the public.

Plans, to be successful, must have good subscriber-doctor relations. Doctors must be paid a fair fee. Premiums must be high enough to pay fully for benefits given, and administration must be effective.

The cash indemnity and the combination indemnity are the two main types of plans in the United

States today. Both are growing rapidly, and there is a demand for both types. Each has its sincere supporters. The fair indemnity fees are accepted by physicians as the full fee for service rendered in the case of the middle and low-income brackets, and the indemnity actually covers the service.

The general opinion is that service for these groups is highly necessary, whatever method of payment is used. Levels of income ceilings under which service is rendered vary greatly. If the levels are too low, the service feature covers few and means very little. A ceiling of $2,400 for individuals and $3,000 for families is a satisfactory level, provided physicians take into consideration the ability to pay of those groups in the fringe above these levels. Large families need special consideration. The Bureau of Medical Economics, as developed in the San Francisco Bay area, is being of assistance to doctors in determining those deserving special consideration.

Enrollment of employed individuals, instead of the usual employed groups, is being experimented with, but here, as with hospital care, the premiums must be higher and benefits somewhat restricted.

Community enrollment drives stimulate plan growth markedly. Although they result in much financial strain to the plan, under threat of compulsory sickness insurance legislation, these drives are absolutely necessary. After a large, sudden growth, a plan must spend most of its effort to strengthen weak groups, increase the percentage requirements of participation to a sound level.

A fee schedule committee appointed by the Medical Association should continually work with the medical care plan; only in this case can satisfactory relations be maintained with member physicians.

Although Boards of Trustees are mainly made up of doctors, lay members can be of great value if carefully selected. They add much from the public and business viewpoints. Medical control must always be kept.

The Blue Shield Commission has now been formed to coordinate medical care plans and gather and extract valuable actuarial statistics, determine sound underwriting practice and administrative processes. There should be more cooperation between the Blue Cross and medical care plans. Recently General Paul Hawley, formerly of the Veterans' Administration, was appointed to coordinate them.

There are 7,500,000 persons covered by Medical Society and Blue Cross sponsored plans. This represents a 50 per cent growth in the last year. Over 90 voluntary plans operate in 42 states.

Members of the California Medical Association are solidly against compulsory sickness insurance. They are heartily in favor of sound-value prepayment plans paying fair fees to physicians. The large majority believe service should be rendered to the medium and low-income groups, with income ceilings around $2,400 for individuals and $3,000 to $3,500 for families, and are in favor of indemnities being paid by those above such groups.

California Physicians' Service has grown rapidly. Community enrollment campaigns were successful, but resulted in more risks being taken. These weak groups are being strengthened, and premium increases are being put into effect. California Physicians' Service's administration has steadily improved. New and larger quarters allow for increased business efficiency. California Physicians' Service is now operating in the black and is establishing a stabilization and reserve fund. Good business sense dictates that a reasonable reserve be built up before the payment of fees to doctors is raised above its present level. California Physicians' Service should develop a sound, natural growth, with as little outside interference as possible.

The Blue Cross plans in California have grown rapidly, providing hospital service in much of California. The Blue Cross plan in Oakland successfully operates an indemnity medical care plan, and complete care is available to hospitalized members. The majority of doctors are in favor of this plan operating in the San Francisco Bay area, where California Physicians' Service and Blue Cross plans do not operate together. The plan in Sacramento operates on an indemnity basis, and has been quite successful. Recently it lost its approval as a Blue Cross plan.

There is need for much closer collaboration between these plans. They are all working toward the same goal—non-profit, voluntary, prepayment medical and hospital care in California.

As to individual physician-patient economic relations and Bureaus of Medical Economics: The successful practice of medicine is based on good professional and economic relations between doctor and patient. If either is weak, the other breaks down. A great deal of attention has been given to improving professional ability by means of better medical training, but comparatively little has been done in teaching medical students and doctors the business of medicine.

Most doctors charge fair fees, but a very few overcharge consistently. These overcharges injure the medical profession. Every county medical association should establish a proper fee structure to protect the public interest and the good name of medicine. The public should be informed that these committees exist.

The Bureau of Medical Economics was originally set up by the Alameda County Medical Association with the idea of improving the individual physician-patient relationship. That has been done. Doctors in areas served by the Bureau of Medical Economics are heartily in favor of the work being carried on. What the Bureau of Medical Economics is, how it functions, and what it does is set forth in the Report of the Alameda County Medical Association on the Bureau of Medical Economics. The report analyzes the cause, prevention and cure of unpaid doctor bills. It is most enlightening. Further study should be made of why doctors have good or bad physician-patient economic relations with patients who are not prompt in paying their medical bills. It is hoped that

further research along these lines will be continued by Bureaus of Medical Economics. This analysis is cited in full as part of the report of the Committee on Medical Economics. I am quite sure that if it hasn't already been passed around to you, it will be.

The committee has reported on the two most important factors in prevention of compulsory sickness insurance: Voluntary, prepayment health plans and the individual physician-patient relationship. Both need further study and development. The committee makes the following recommendations:

1. That the California Medical Association initiate the formation of a committee to continually study the problems and difficulties of prepayment health plans and to develop close collaboration between the Blue Cross and the California Physicians' Service, the Association of California Hospitals and the California Medical Association; this committee to consist of one member from each of the above organizations, and said committee then to select such executives from these organizations as may be deemed advisable.

2. That the fee schedule committee of the California Medical Association work continually with the California Physicians' Service in the development of fair fees to doctors, making its report directly to California Physicians' Service.

3. That California Physicians' Service be urged to establish a satisfactory stabilization and reserve fund before increasing the 80 per cent dollar value of fees now being paid.

4. That California Physicians' Service be allowed to consolidate its growth in the last two years on a sound insurance basis with as little outside influence as is possible.

5. That the Bureaus of Medical Economics be commended on their fine work in furthering good individual relations; and that further research be encouraged and supported.

6. That the California Medical Association take aggressive action to develop further the teaching of medical economics by those best informed on the subject in medical schools, hospitals with internal residence training programs, and county medical associations.

7. That in order to further improve the physician-patient economic relationship, the California Medical Association endeavor to set up and act upon, a professional conduct system and a fair fee structure; and that county medical associations inform the public that such things exist.

Respectfully submitted, Howard W. Bosworth, Los Angeles; Dell T. Lundquist, Palo Alto; and H. Gordon MacLean of Oakland, chairman. Thank you very much. (Applause.)

SPEAKER ALESEN: The report of the Committee on Medical Economics will be turned over to Reference Committee No. 1.

At this time the House of Delegates will recess, to be reconvened later. I now turn the gavel over to Dr. Lowell S. Goin, president of the California Physicians' Service. Dr. Goin.

. . . Whereupon the House of Delegates was recessed, to be reconvened later. The gavel was passed to Dr. Lowell S. Goin, who called the Meeting of Administrative Members of the California Physicians' Service to order. . . .

SPEAKER ALESEN: We will now take a short recess, ladies and gentlemen, so that you may have a chance to stretch.

. . . Whereupon a short recess was taken. . . .

SPEAKER ALESEN: Will the House of Delegates please be seated and come to order. The House of Delegates will now reconvene, and we shall reconvene on Item (n), the report of the Committee on Public Policy and Legislation; Dr. Dwight H. Murray, chairman.

DR. ROY E. SHIPLEY: Members of the House of Delegates, I move we go into Executive Session.

. . . Whereupon the motion was duly seconded. . . .

SPEAKER ALESEN: How do you wish to define those who would remain in Executive Session? Ordinarily the delegates and alternates, the Executive Secretary and legal counsel, past presidents, are allowed to remain. Is that your wish, Dr. Shipley?

DR. SHIPLEY: That is my wish.

SPEAKER ALESEN: Do you wish to include members of the California Medical Association who wish to remain?

DR. SHIPLEY: Yes, that is agreeable.

SPEAKER ALESEN: It has been moved and seconded we go into Executive Session; this means, ladies and gentlemen, that any matters discussed and any decisions reached are to remain entirely within the halls of this House of Delegates and are not to be discussed outside.

. . . The motion was then duly carried and the House of Delegates then went into Executive Session. . . .

SPEAKER ALESEN: Is it the will of the House that we now arise from Executive Session?

. . . Whereupon it was moved, seconded and duly carried that the House of Delegates of the California Medical Association arise from Executive Session. . . .

SPEAKER ALESEN: We will now proceed to the report of the Committee on Scientific Work by Dr. L. Henry Garland.

DR. GARLAND: Nothing additional to report.

SPEAKER ALESEN: The report of the Cancer Committee; Dr. Lyell C. Kinney; chairman.

DR. KINNEY: Nothing further to report.

SPEAKER ALESEN: The report of the Editorial Board; Dr. Dwight L. Wilbur, chairman.

DR. WILBUR: Nothing new to report.

SPEAKER ALESEN: Now the reports of the Special Committees. Delegates to the American Medical Association; Dr. John W. Cline, chairman.

DR. CLINE: No additional report.

SPEAKER ALESEN: Physicians' Benevolence Committee; Dr. Axcel E. Anderson, chairman.

DR. ANDERSON: Nothing further to report at this time.

SPEAKER ALESEN: Advisory Planning Committee; Mr. John Hunton, chairman.

MR. HUNTON: No further report.

SPEAKER ALESEN: The Committee on Redistricting Council Districts; Dr. G. Dan Delprat, chairman.

DR. DELPRAT: Mr. Chairman, a committee of eight members was appointed to study the nine Councilor Districts. The function of this committee was to survey the nine Councilor Districts, with ideas of redistricting the county societies within those districts. It was not the function of this committee to question the numbers of districts which are arranged through the constitution. In view of those facts, this committee recommends no change at the present time.

SPEAKER ALESEN: The report will be referred to Reference Committee No. 1.

Now the report of the Committee on Revision of Constitution and By-Laws; Dr. Sam J. McClendon, chairman, and past president of the California Medical Association. (Applause.)

DR. MCCLENDON: Mr. Speaker, members of the House of Delegates. I am not going to read you this 45-page report, so don't be too alarmed. (Applause.)

This committee was created at the last annual session by resolution, which I shall now read.

. . . Whereupon resolution referred to was read. . . .

The committee met in three full-day sessions, and in addition it divided itself into five sub-committees, each of which met several times. The committee actively considered the objectives specifically stated in the resolution creating it. The entire present constitution and by-laws were revised, section by section, and a completely new constitution and by-laws has been presented and approved by the committee for submittal to the House of Delegates at this time; that is this 45 pages which I am not going to read to you.

Mr. Speaker, I submit a part of this committee's complete report on the constitution and by-laws for this association. Sufficient copies should be mimeographed for us by the reference committee to which this is referred, so that any delegate who wishes may be able to inspect the result of our labors. I think it is the duty and obligation of every delegate here to familiarize himself with this proposed revision. We have tried to make it practicable and workable, and have streamlined it to the point where it is about one-third the size of the present one. I call attention to the fact that it will have to lie on the table until the 1949 annual session, and in the meantime, of course, no changes will be made in its present form, as submitted to you by the committee. Therefore, if any delegate desires any change or alteration in the form of this proposed new constitution, he should appear before the reference committee and submit his proposed change before the Tuesday meeting of the House of Delegates at this session. In accordance with the present constitution, the entire new constitution and by-laws will be published at least twice in the magazine CALIFORNIA MEDICINE before the 1949 annual session. Mr. Speaker, this constitutes the report of this committee. I hand you herewith our report, and, as a part of our report, a complete copy of the new constitution and by-laws. (Applause.)

SPEAKER ALESEN: Thank you, Dr. McClendon. This report will be referred to Reference Committee No. 1.

At this time Dr. Donald A. Charnock, your Vice-Speaker, will take over the gavel.

VICE-SPEAKER CHARNOCK: Old and unfinished business.

There are six constitutional amendments which are printed on pages 6 and 7 of the official program. These constitutional amendments are referred to Reference Committee No. 3.

New business is now in order.

New Resolutions

DR. EDWIN L. BRUCK: Mr. Speaker, President Cline and members of the House of Delegates, I have here about five resolutions emanating from the Council which I wish to present to you at this time. If I may be permitted, Mr. Speaker, I would like to make an introductory remark or two about each one. The first resolution concerns the matter of drafting of physicians for what may be a forthcoming national emergency. As you know, there is present, but not yet acted upon, legislation in the Congress of the United States, both in the Senate and House, with regard to the reactivation of the draft, to include the drafting of physicians. This resolution has to do with that:

Resolution No. 1

"WHEREAS, Present world conditions make war involving this country more than a remote possibility, and

"WHEREAS, The methods of induction of medical officers used in the recent war resulted in inefficient utilization of their professional abilities, undue reduction in medical personnel to care for civilian needs in certain areas, and unnecessary hardship upon individual physicians, and

"WHEREAS, The medical profession is of the opinion that these conditions could be materially improved in a future emergency by adequate planning, and

"WHEREAS, The Armed Services have indicated a desire for aid and counsel of the medical profession in this program; now therefore, be it

"*Resolved:*

"1. That the House of Delegates of the California Medical Association instruct its Delegates to the House of Delegates of the American Medical Association to introduce and press for passage a resolution in that body offering the services of the American Medical Association to the Armed Forces in planning orderly methods of selection and induction of medical officers in case of need; and

"2. That if the House of Delegates of the American Medical Association should not so act, that the Council be instructed (a) to appoint a committee to conduct a survey of the physicians of California with

reference to: Location, ratio of physicians to population, sex, age, health, dependency status, professional training, military experience, holding of reserve commissions, probable availability for military service, and any additional data which may be deemed advisable, and (b) to consider and draw up plans for methods of determination of availability for military and civilian service."

I will present this resolution, Mr. Speaker.

VICE-SPEAKER CHARNOCK: It is referred to Reference Committee No. 3.

Resolution No. 2

DR. BRUCK: Resolution No. 2 has to do with the activities of the State Board of Health, activated by joint resolution of the Assembly and the Senate in the 1947 session. This resolution instructed the State Board of Health to make inquiry into, to survey the needs of and to make provisions for the care of, chronic alcoholism. The State Board of Health appointed an advisory committee consisting of numerous and sundry individuals throughout the state; it is composed of a member of the Farm Bureau, a member of the Welfare organizations, two members of the State Board of Health, a member from the California Tuberculosis and Health Association, a member of the California Heart Association, a member of the Hospital Association, a member of the Public Health Officers Association, and one member from the California Medical Association. In attacking the various problems involved, the State Board of Health expressed a desire to talk over, or at least to inquire into, what they consider one of the prime public health needs at the moment, chronic alcoholism. It was thought by this committee that it would be better if this study were made by the medical profession, rather than by the State Board of Health, and the promise was made that this resolution would be introduced into the House of Delegates, as follows:

"WHEREAS, The problem of chronic alcoholism and its care is apparently an increasing problem in the State of California, and

"WHEREAS, The attack upon and the solution of this problem involve the study of many phases of this condition, including incidence, causes, and methods of treatment, and

"WHEREAS, Such treatment may appropriately involve the custodial care by the state of those individuals suffering from the condition, and

"WHEREAS, The State Department of Public Health has shown an active interest in the solution of this problem, and

"WHEREAS, The studies necessary to obtain proper information regarding this condition are medical in their scope, and

"WHEREAS, The treatment of the condition is the practice of clinical medicine and clinical psychiatry, and

"WHEREAS, Such clinical treatment is the direct concern of the medical profession; now therefore, be it

"Resolved: That the C.M.A. set up a committee to be appointed by the President of the C.M.A. on an annual basis, to study the clinical and other aspects of this condition and that such a committee be composed of doctors of medicine, to include psychiatrists, and a member of the State Department of Public Health; and be it further

"Resolved: That an advisory committee composed of a member of the Farm Bureau, an insurance executive, representatives of the churches, and a member of the State Department of Motor Vehicles, be selected by this committee of the C.M.A.; and be it further

"Resolved: That this committee make a study of chronic alcoholism in its various phases, and that the results of this study be made available to the State Department of Public Health as acquired; and that an annual report be made to the House of Delegates of the C.M.A.; and be it further

"Resolved: That a sum, not to exceed $..... be appropriated by this House of Delegates to defray travel and other expenses of this committee."

VICE-SPEAKER CHARNOCK: This resolution is referred to Reference Committee No. 3.

Resolution No. 3

DR. BRUCK: These next three resolutions have to do with a revision of the By-Laws of the C.M.A., as they are at present. The first of these three has to do with committees, to try to streamline the work of the reference committees in the House of Delegates.

"Resolved: That Chapter III, Section 6(a) of the By-Laws of the California Medical Association be and the same is hereby amended, to read as follows:

"Section 6(a) Appointment of Committee on Credentials and four Reference Committees. Prior to or at the beginning of an annual session, the Speaker of the House shall appoint from the members thereof the following committees:

1. A Committee on Credentials.

"2. A Reference Committee on the Reports of Officers, the Council and Standing and Special Committees.

"3. A Reference Committee on Finance, to review the Reports of the Secretary-Treasurer and the Executive Secretary and to study and make recommendations to the House of Delegates on the budget submitted by the Council and the amount of dues for the ensuing year.

"4. A Reference Committee on Resolutions, Amendments to the Constitution and By-Laws and New and Miscellaneous Business.

"5. A Reference Committee on Executive Session, to consider business brought before the House of Delegates in Executive Session."

I submit this resolution.

VICE-SPEAKER CHARNOCK: Referred to Reference Committee No. 3.

Resolution No. 4

DR. BRUCK: This resolution, which has also to do with amending the By-Laws, refers to Chapter II, Section 10 of the By-Laws of the California Medical Association, and reads as follows:

"*Resolved:* That Chapter II, Section 10 of the By-Laws of the California Medical Association be and the same is hereby amended by deleting the final sentence of the Section, which reads: 'If a member who so transfers his residence be not elected to membership in the society of the county into which he has moved, he shall have the right to maintain his membership through payment of dues in the society of the county of his former residence if that component county society gives its sanction thereto.' "

This would delete that sentence entirely from the By-Laws.

And the last one has to do with membership where the major office of the practitioner and his residence are in different counties.

Resolution No. 5

"*Resolved:* That Chapter II, Section 9(c) of the By-Laws of the California Medical Association be and the same is hereby amended, to read as follows:

Section 9(c) Membership where Major Office and Residence are in Different Counties. A doctor of medicine who has his major office for professional practice in one county and resides in another county, or who has a major office of practice in one county and a minor office of practice in another county shall be eligible to apply for membership only in the county medical society in which his major office of practice is located."

I submit this resolution, Mr. Speaker.

VICE-SPEAKER CHARNOCK: These last three resolutions suggesting changes in the By-Laws are referred to Reference Committee No. 3, and according to our By-Laws, they may be acted upon within 24 hours. We are now open for the presentation of other resolutions.

Resolution No. 6

DR. WILLIAM G. DONALD (Alameda County): Mr. Speaker, gentlemen, my resolution reads as follows:

"WHEREAS, The practice of medicine in hospitals must be in accordance with the principles of medical ethics, just as the practice of medicine outside of hospitals, and

"WHEREAS, It is particularly important that interns, residents and fellows who acquire their first experience in the practice of medicine in hospitals, do so under circumstances and in an environment that teaches them to honor, respect and obey the principles of medical ethics, and

"WHEREAS, Approval by the Council on Medical Education and Hospitals of the American Medical Association of any hospital in which unethical practices have existed is not to the best interests of the medical profession or the public, and tends to impair the ability of county medical societies to maintain and enforce the principles of medical practice; now therefore be it

"*Resolved:* That the delegates of this Association, California Medical Association, to the House of Delegates of the American Medical Association are hereby requested and instructed to cause to be introduced at the next meeting of the House of Delegates of the American Medical Association, an appropriate resolution directing the Board of Trustees of the American Medical Association and the Association itself to cause the Council on Medical Education and Hospitals to add to its basic requirements for approval of a hospital for interns, residencies or fellowships the express condition that the hospital establish to the satisfaction of the Council on Medical Education and Hospitals that no unethical practices by doctors of medicine, the hospital itself, or others have been permitted to exist or to take place within the hospital; and be it further

"*Resolved:* That a copy of this resolution be forwarded by the Secretary of this Association to each of the delegates and alternates of this Association to the House of Delegates of the American Medical Association."

VICE-SPEAKER CHARNOCK: Thank you, Dr. Donald, this will be referred to Reference Committee No. 3.

Resolution No. 7

DR. FRANK G. CRANDALL (Los Angeles County): Mr. Speaker, members of the House of Delegates, I have been directed by the two allergy societies that have been formed in this state to bring this resolution before the members of the House of Delegates:

"WHEREAS, Within the membership of the California Medical Association there have been for a number of years a large number of physicians who are specializing in the practice of allergy, and whose primary interests are in the field of allergic diseases rather than in any of the other branches of medicine which now have Sections authorized within this Association, and

"WHEREAS, The allergists in this Association being primarily interested in advancing themselves in scientific knowledge pertaining to their own specialty, have organized within this state during the past year and a half the Los Angeles Society of Allergy, a Section of the Los Angeles County Medical Association, composed of more than twenty-five members, and the Northern California Society of Allergy composed of approximately the same number of members; and these organizations have regular meetings with a scientific program and business meetings, and because of these meetings a great deal of benefit has been derived for the members of these organizations, and

"WHEREAS, There are a number of physicians specializing in allergy in other sections of the state other than in these two metropolitan areas, who now have no opportunity to affiliate themselves with other physicians in this specialty, and

"WHEREAS, The allergists in this state who are members of the American Academy of Allergy and

the American College of Allergists, and who in a great many instances have been certified by the American Board of Certified Allergists, and

"WHEREAS, Due to the fact that practically all of the meetings of these large allergy organizations are held in the East where it is impractical for the allergists from the West Coast always to attend, and

"WHEREAS, There are many economic problems connected with fee schedules and other matters to be agreed upon and determined by the allergists to cover work done in their own specialty, and

"WHEREAS, It will be of great benefit to the members of this Association who are allergists to be able to have an Allergy Section created within the California Medical Association so that they may hold Allergy Section meetings in connection with the California Medical Association; now therefore be it

"*Resolved:* That the House of Delegates of the California Medical Association assembled in San Francisco, California, on April 11, 1948 and April 13, 1948, under the provisions of the Constitution of the California Medical Association, Article VIII, Section 3, do hereby authorize the establishment of an Allergy Section of the California Medical Association, and authorize this Section to hold meetings and transact other business as provided under the Constitution and By-Laws of this Association."

If I may have your permission to comment briefly, this afternoon at the Palace Hotel there were over 40 allergists and those interested in that subject; they unanimously endorsed this resolution and directed me to introduce it here tonight.

VICE-SPEAKER CHARNOCK: The resolution will be referred to Reference Committee No. 3.

Resolution No. 8

DR. A. B. DIEPENBROCK (San Francisco County): Ladies and gentlemen, I have several resolutions which I will now read:

"WHEREAS, Approved facilities for graduate training are inadequate to provide such training for the numbers of physicians desiring it, and

"WHEREAS, Hospitals which have physical plants and clinical material adequate to furnish good training but for various reasons are not approved for intern or resident training; now therefore, be it

"*Resolved:* That the Council of the California Medical Association appoint a committee of five, who shall be members of the faculties of the medical schools of this state to advise and assist hospitals in attaining a status of approval."

Resolution No. 9

The second resolution reads as follows:

"WHEREAS, It has come to the attention of the House of Delegates of the C.M.A. that the Veterans' Administration accepts patients with non-service connected disabilities without social service screening of said patients, and

"WHEREAS, It has come to the attention of the House of Delegates of the C.M.A. that the Veterans' Administration admits patients with injuries that come under the provisions of the Workmen's Compensation Act of the State of California and are therefore the liabilities of private insurance carriers rather than the taxpayers of the county; now therefore, be it

"*Resolved:* That the House of Delegates of the C.M.A. request a resolution to be submitted by the California Medical Association delegates to the A.M.A. recording our opposition to these practices and that a joint committee of representatives of the A.M.A. and the Veterans' Administration be held to consider rectification of such abuses as infringe upon the proper rights of private medical practice."

VICE-SPEAKER CHARNOCK: The previous two resolutions will be referred to Reference Committee No. 3.

Resolution No. 10

DR. DIEPENBROCK: The next resolution reads as follows:

"WHEREAS, The numerous resolutions passed by the delegates of the C.M.A. already cover the practice of medicine by corporations and unlicensed groups, and

"WHEREAS, The C.M.A. has already made a comprehensive and adequate study of the problem (Vol. 43, No. 1, July, 1935; Vol. 45, No. 1, page 86, July, 1936; Vol. XL, No. 6, page 439; Vol. 46, No. 6, page 419, July, 1937); now therefore, be it

"*Resolved:* That these resolutions and reports be reactivated and that the House of Delegates of the C.M.A. direct the appropriate committee to reconsider the entire action."

Resolution No. 11

The next resolution reads as follows:

"WHEREAS, The State Franchise Tax Commission via the agency of the Board of Equalization is attempting to regulate the level of salaries of physicians practicing medicine in the hospitals of California (such as pathologists, roentgenologists and anesthesiologists) and in certain instances surgeons and internists practicing in county hospitals in California, and

"WHEREAS, The same agency has indicated that the salaries of the above practitioners of medicine shall not exceed the level of salaries of their confreres employed in civic, county and state institutions, and

"WHEREAS, A survey of salaries in state, county and civic institutions were investigated by the Legislative Committee of the C.M.A. and found to be below the subsistence level, and

"WHEREAS, Said Agencies, in order to enforce their decisions, have forced certain institutions paying physicians above-mentioned in excess of the said basic rate to abandon or jeopardize their non-profit status and to pay taxes and other penalties because of this action; now therefore, be it

"*Resolved:* That the Legislative Committee of the C.M.A. be instructed to modify existing code governing such practices, exempting physicians from its regulations."

VICE-SPEAKER CHARNOCK: Reference Committee No. 3.

Resolution No. 12

DR. DIEPENBROCK: And the final resolution sponsored by the San Francisco County Medical Society:

"WHEREAS, In the 1947 session of the California Legislature there were 4,317 bills introduced in both houses, and

"WHEREAS, Of this number, 239 directly affected the practice of medicine and required constant investigation and surveillance, and

"WHEREAS, Anti-vivisectionists, cultists, and others were fostering legislation, and chiropractors and naturopaths again attempted to extend their scope of practice by legislation, and

"WHEREAS, Two bills, Senate Bill 788 and Assembly Bill 1500 on compulsory health insurance were the major legislative issues of the 1947 legislature, and

"WHEREAS, Both bills were tabled in committee, and

"WHEREAS, No legislation inimical to the medical profession was enacted by the 1947 legislature of California, and

"WHEREAS, This exceptional record of accomplishment is mainly the result of the efforts of the Committee on Public Policy and Legislation of the California Medical Association, aided by the Public Health League of California, and

"WHEREAS, This Committee, under Chairman Dwight L. Murray, gave unstintingly of its time and ability to foster sound medical practice and further the public health; now therefore, be it

"*Resolved*, That the House of Delegates of the California Medical Association extend its sincere thanks and congratulations to the Committee on Public Policy and Legislation for its efforts and achievements."

VICE-SPEAKER CHARNOCK: The resolution will be referred to Reference Committee No. 3.

Resolution No. 13

DR. J. SEVERY HIBBEN (Los Angeles County):

"WHEREAS, The complete minutes of proceedings of the California Medical Association, House of Delegates, are not printed in the official journal, and

"WHEREAS, Constituted authorities of component county societies from time to time have occasion to need the complete minutes of the California Medical Association House of Delegates in their discussion of actions taken by the State Association; now therefore, be it

"*Resolved:* That the Council be instructed to have copies of the official minutes made, so that several of these copies would be available to component county societies that may desire to refer to the same."

VICE-SPEAKER CHARNOCK: This resolution is referred to Reference Committee No. 3. As each member comes forward, will he please state his name and county?

Resolution No. 14

DR. FREDERIC J. GASPARD (Los Angeles County): Mr. Speaker and members, my resolution is the following:

"WHEREAS, The Workmen's Compensation Laws of California relating to industrial injuries and illnesses have been criticized because of the limitations surrounding the securing of advice and care and treatment by employees from doctors of medicine, other than doctors of medicine who have been designated by an insurance carrier, and

"WHEREAS, Especially in metropolitan areas it should be possible for an insurance carrier to give an injured workman the names of more than three physicians, when he asks for a change of doctor; now therefore, be it

"*Resolved:* That the Council appoint a proper committee to seek a solution of this problem and submit a detailed report thereon with recommendations at the next annual session."

VICE-SPEAKER CHARNOCK: The resolution will be referred to Reference Committee No. 3.

Resolution No. 15

DR. A. E. ANDERSON (Fresno County): This is an idea suggested by our Executive Secretary:

"WHEREAS, Some members of the Association elect to apply for Life Membership in the Association and pay a fee in order to obtain such membership, and

"WHEREAS, Other members of the Association, because of illness or other reasons are in actual financial want, and

"WHEREAS, Some members of the Association who wish to maintain active membership in order to maintain their professional liability insurance and their hospital staff memberships, may be among those who are in financial need; now therefore, be it

"*Resolved:* That the fees paid by those members applying for life membership shall not be mingled with general funds of the Association but shall be segregated and placed in the hands of the Physicians' Benevolence Committee and be made available by that Committee, for the payment of active membership dues for those members of the Association to whom active membership conveys a real meaning and necessity and who, for reasons satisfactory to the Physicians' Benevolence Committee, shall need financial assistance at such time as such funds may be available for disbursement in this manner."

VICE-SPEAKER CHARNOCK: Referred to Reference Committee No. 3.

Resolution No. 16

DR. JOHN BULLIS (Los Angeles County): This resolution is self-explanatory:

"*Be It Resolved:* That any physician who accepts a rebate is guilty of unethical conduct and such conduct is incompatible with membership in the California Medical Association. As the term 'rebate' is used herein, it means money, credits, or anything of value, which is received, directly or indirectly, in

any guise whatever, by the referring physician from any person, partnership, or corporation, profit, nonprofit, or cooperative, to whom a patient or any person is referred or sent for medical or laboratory services, or for medical or professional device, equipment, materials, or supplies."

VICE-SPEAKER CHARNOCK: Referred to Reference Committee No. 3.

Resolution No. 17

DR. WILBUR BAILEY (Los Angeles County): These resolutions are a part of a broad, general practice undertaken by the Los Angeles Radiological Society to stop rebating and keep it down and stopped:

"*Resolved:* That Section 4 of Chapter I of the By-Laws of this Association, California Medical Association, be and the same hereby is amended by adding to said section a new paragraph following the present second paragraph of the section and reading as follows:

" 'A member shall not refer his patients for diagnostic or other procedures to a laboratory or to another physician under such circumstances that a member receives, either directly or by way of a credit or charge account or otherwise, any reward or remuneration on account of such referral.'

so that said Section 4 of Chapter I will hereafter read as follows:

" '*Section 4.—Component County Societies Exclusive Judges of Qualification of Applicants for Membership.* Each component county society shall, subject to the minimum requirements for eligibility as provided by the Constitution, determine the qualifications for membership therein and shall be the sole judge of the qualifications of applicants for such membership.

"A member must not practice or claim to practice, support, cooperate with or in any other way endorse, any exclusive or sectarian system of medicine. He shall be honorable and ethical in his conduct and shall subscribe to the principles of medical ethics of the American Medical Association and to such as may from time to time be adopted by the California Medical Association, and shall recognize the authorized officers of his component county society and of this Association as the proper authority to interpret any doubtful points in ethics.

"A member shall not refer his patients for diagnostic or other procedures to a laboratory or to another physician under such circumstances that a member receives, either directly or by way of a credit or charge account or otherwise, any reward or remuneration on account of such referral.

"Every applicant for membership in a component county society shall fill out and sign in duplicate the application blanks provided by the society, which prescribe the necessary qualifications for membership. One copy of each such application shall be promptly forwarded to the office of this Association."

VICE-SPEAKER CHARNOCK: The preceding resolution is referred to Reference Committee No. 3.

Resolution No. 18(a)

DR. BAILEY: The next resolution is the following:

"WHEREAS, A tremendous amount of publicity has occurred in newspapers throughout the United States, and Los Angeles in particular, concerning medical kick-backs since January, 1948, and

"WHEREAS, Such publicity is of a highly unfavorable nature to the medical profession, and

"WHEREAS, If the Council of the Los Angeles County Medical Association which was well aware of the problem had taken an active stand against rebating, and had actually changed its by-laws to prevent such practices during previous years when the matter was repeatedly and forcibly brought to the attention of this Council, this publicity could have been averted, and

"WHEREAS, Anti-rebating resolutions by the Los Angeles County Medical Association Council made in 1929, 1940, 1942, 1943, 1947 and 1948 have all failed up to the present time to stop such unsavory practices, and

"WHEREAS, An article in the January, 1948, *Reader's Digest* entitled, 'Better Vision with a Kick-back,' states:

" 'In 1942 the House of Delegates of the American Medical Association formally condemned eye glass rebates, calling the practice "basically dishonest," and pointing out that "all such unethical practices are disreputable and unscrupulous and, if not controlled, may soon besmirch the reputation of the entire medical profession."

" 'This resolution called upon county medical societies to subject violators to disciplinary action. In August, 1946, the resolution was again called to the attention of physicians.

" 'Organized medicine seems to have contented itself with these verbal condemnations. More than a year ago the Government published the names of 52 physicians who had accepted half a million dollars in rebates. Until this writing not a single one of them has been disciplined by the medical societies,' and

"WHEREAS, An article entitled 'Medical Kick-backs Can Be Ended,' will be presented to the twenty million subscribers of the *Reader's Digest* in May, 1948, which reads as follows:"

(and I would like to refer back to that later on)

"*Now Therefore Be It Resolved:* That since the basic purpose of the American Medical Association is the protection of the public against unscrupulous practices by physicians, and since these organizations receive the brunt of the unfavorable publicity caused by members who are involved in unethical practices, and since it has been proven over the years that small, but well-organized, minorities in a component county society can effectively evade the Code of Ethics to promote their own selfish interest, and

"Since it has further been shown that charges of rebating or other forms of unethical conduct can be effectively suppressed without a hearing, even though the charges are made by as many as 24 members as

happened before the Los Angeles County Medical Association Council in 1948, and

"Since our By-Laws as written at the present time permit the right of appeal to the California Medical Association or the American Medical Association only to the member accused of unethical conduct, but deny it to his accuser, the following amendment to Section 4 of the Disciplinary Procedure of the California Medical Association is offered:

"That the first paragraph be changed so that the first sentence, which reads as follows:

" 'A member of a component county society may appeal from the action of such component county society to the Council of this Association within the period of two months succeeding the date of such censure, suspension, or expulsion.'

will be followed by this sentence:

" 'The same right of appeal to the California Medical Association Council will be granted to those bringing charges of unethical conduct, if the Council of the county society has refused to review such charges or has ruled against the accuser.' "

That makes it work both ways. Now I have referred to this article which will be published in the *Reader's Digest* in the May issue, and the release date, Mr. Speaker, is not until April 23. It was not referred to specifically in the resolution because it would have to be read in Executive Session.

VICE-SPEAKER CHARNOCK: That is discussion, and therefore cannot be admitted at this time. It may be brought up tomorrow. The resolution is referred to Reference Committee No. 3.

Resolution No. 18(b)

DR. BAILEY:

"*Resolved:* That the attention of the Standing Committee on Membership and Organization of this Association is hereby directed to the exercise of its duties and powers under Subdivision (e) of Section 4 of Chapter II of the By-Laws, and under Section 4 of Chapter I; which require that all members of this Association be honorable and ethical in their conduct and subscribe to the principles of medical ethics of the A.M.A.; and be it further

"*Resolved:* That the Standing Committee on Membership and Organization is further directed to investigate any and all instances that it may discover of rebating practices or of practices under which members of this Association may in any manner receive a reward or benefit as a result of referring patients to others; and wherever said Committee shall find any instances of rebating or practices under other guise which amounts to rebating, that it forthwith prefer charges to the Secretary of the accused member's county society and prosecute said charges as it is in duty bound to do under said subsection of Section 4 of Chapter II of the By-Laws; and be it further

"*Resolved:* That the Council is hereby directed to give the Standing Committee on Membership and Organization all assistance, financial and otherwise, that said Committee may reasonably require in order to carry out the instructions contained in this resolution."

VICE-SPEAKER CHARNOCK: Referred to Reference Committee No. 3.

Resolution No. 19

DR. BURT DAVIS (Santa Clara County):

"WHEREAS, The House of Delegates of the California Medical Association has instructed the Council to examine all forms of medical practice and to compile a code of medical ethics, and

"WHEREAS, The general public and the Legislature of the State of California have been interested in certain problems concerning the ethical relationships between members of the healing arts, and

"WHEREAS, The California Medical Association has indicated that it will assist the Legislature of the State of California in the incorporation into the business and professional code of matters which heretofore have been only ethical considerations between members of the medical profession, and

"WHEREAS, There does now exist a double standard for the interpretation of medical ethics in that different tests for ethical conduct depend upon the contractual relationships between doctors, and

"WHEREAS, This double standard has operated to the great disadvantage of the individual practitioner upon whom the burden of medical practice and the defense of the private practice of medicine is largely imposed; now therefore, be it

"*Resolved:* That this House of Delegates of the California Medical Association charges the Council of the California Medical Association and all officers and members of the California Medical Association who may contact the public or its representatives to develop a single standard of medical ethics applicable to individuals and partnerships without discrimination; and be it further

"*Resolved:* That the codification of ethics as effected by the Council shall stipulate that all tests for professional ethics be equally applied regardless of the contractual arrangements between members of this Association; and be it further

"*Resolved:* That progress reports on this matter shall be rendered by the Council of the California Medical Association to the House of Delegates at each succeeding session."

VICE-SPEAKER CHARNOCK: Referred to Reference Committee No. 3.

Resolution No. 20

DR. WESLEY SMITH (San Diego County): The San Diego County Medical Society has asked me to introduce five short resolutions:

"WHEREAS, The San Diego County Medical Society feels that it has received less assistance from the California Medical Association Public Relations Counsel that its financial support would seem to warrant; now therefore, be it

"*Resolved:* That the San Diego Medical Society and all other smaller county societies should receive

assistance from the California Medical Association in the formulation of Public Relations Policy in direct proportion to the contribution of its members to the California Medical Association treasury."

VICE-SPEAKER CHARNOCK: Referred to Reference Committee No. 3.

Resolution No. 21

DR. SMITH: (Reading)

"WHEREAS, The San Diego County Medical Society feels that the present archaic coroner's system of conducting postmortem examinations acts to prevent practitioners and hospital staffs from participating in or observing the autopsies, and

"WHEREAS, This acts to prevent the proper practice of medicine and advancement of the science of medicine; now therefore, be it

"*Resolved:* That the Council of the California Medical Association foster legislation to correct these inadequacies to the governing bodies of the State of California."

VICE-SPEAKER CHARNOCK: Referred to Reference Committee No. 3.

Resolution No. 22

DR. SMITH: (Reading)

"WHEREAS, Over 50 per cent of the California Medical Association membership lies within the southern counties and distance precludes the proper liaison of the various activities of the California Medical Association; now therefore, be it

"*Resolved:* That a branch office of California Medical Association be established in one of the southern counties.

VICE-SPEAKER CHARNOCK: Referred to Reference Committee No. 3.

Resolution No. 23

DR. SMITH: (Reading)

"WHEREAS, The law providing for the care of crippled children originally was intended to encompass that group of individuals disabled by orthopedic infirmities, and

"WHEREAS, The authorities through bureaucratic administrative regulation without direct or indirect authorization by the electorate, have defined as 'crippled,' all individuals under 21 suffering from any ailment or disease; now therefore, be it

"*Resolved:* That the House of Delegates investigate the basic authority of the administrative agency concerned and the apportionment and expenditure of funds under the Crippled Children's Act. A report and recommendation for correction of this condition shall be made to the 1949 House of Delegates."

VICE-SPEAKER CHARNOCK: This resolution is referred to Reference Committee No. 3.

Resolution No. 24

DR. SMITH: (Reading)

"WHEREAS, The Mental Hygiene Clinics recently established throughout the state seriously encroach on the private practice of medicine; now therefore, be it

"*Resolved:* That the House of Delegates foster legislation to restrict the practice of the State Mental Hygiene Clinics to indigent patients."

VICE-SPEAKER CHARNOCK: Reference Committee No. 3.

Resolution No. 25

DR. D. C. OAKLEAF (Sonoma County): (Reading)

"WHEREAS, It is the present policy of the Veterans' Administration to admit for hospitalization veterans with non-service connected disabilities who are able to pay for medical care, and

"WHEREAS, This policy is contrary to Public Law 40, which states that only indigent veterans with non-service connected disabilities are eligible for hospitalization in a Veterans' Faculty, and

"WHEREAS, Such a policy denies hospitalization to the veteran with service connected disability, and

"WHEREAS, Such a policy puts an unnecessary tax burden on the public; now therefore, be it

"*Resolved:* That the delegates from California to the A.M.A. House of Delegates be instructed to bring this matter before said House of Delegates and request that the A.M.A. take steps to end this illegal practice."

VICE-SPEAKER CHARNOCK: Referred to Reference Committee No. 3.

Resolution No. 26

DR. ORRIN S. COOK (Sacramento County): This resolution is on behalf of some hospitals in connection with fees paid by C.P.S. for certain medical services.

"WHEREAS, In Northern California it has become necessary for C.P.S. to write 'hospitalization insurance' in order to fulfill the contract with its beneficiary membership to furnish hospitalizations, and

"WHEREAS, In certain hospitals, the management demands payment of radiological and pathological fees on a 100 per cent basis, whilst physicians in those specialties in practice outside of hospitals accept payment on a unit basis (present on an 80 per cent level), and

"WHEREAS, This demand by these hospitals results in unfair and discriminatory disparity in payment for identical types of medical service, with resulting decrease in funds payable for other medical service; now therefore, be it

"*Resolved:* That the House of Delegates herewith deplores this policy, and respectfully urges the hospitals involved to discontinue it on or before June 30, 1948; and be it further

"*Resolved:* That C.P.S. be requested to forward copies of this resolution to all hospitals known to demand a unit higher than that paid to physicians in non-hospital practice; and be it further

"*Resolved:* That this matter be reviewed at the first 1949 meeting of this House."

VICE-SPEAKER CHARNOCK: This will be referred to Reference Committee No. 3.

Resolution No. 27

DR. NEILL JOHNSON (San Joaquin County): Mr. Speaker, Members of the House of Delegates:

"WHEREAS, The American Medical Association has approved the World Health Organization, and

"WHEREAS, The World Health Organization has been approved by the United States Senate and the United States Department of State, and

"WHEREAS, The Ways and Means Committee of the United States Congress has not as yet reported approval of the World Health Organization, and

"WHEREAS, Disease knows no international boundaries and there is no other world health service in force at this time; now therefore, be it

"*Resolved:* That the House of Delegates of the California Medical Association go on record as favoring a World Health Organization; and be it further

"*Resolved:* That the members of the Ways and Means Committee of the United States Congress and the Representatives from California to the United States Congress be memorialized of this action."

VICE-SPEAKER CHARNOCK: Thank you, Dr. Johnson. This will be referred to Reference Committee No. 3.

Resolution No. 28

DR. FRANK B. REARDON (Sacramento County): This is a little better; I am going to give you something more for your money. This is sponsored by the California Society for Internal Medicine, and we approve and suggest this action to our members:

"WHEREAS, Insurance companies request information concerning the physical condition of applicants for insurance who are at present, or have been patients of private physicians, and

"WHEREAS, The information given by such physicians is of value in appraising the risk of those applicants, and

"WHEREAS, While most companies do pay the physicians from one to two dollars per report, this compensation is not sufficient for the annoyance and actual cost to the physician for such service; now therefore, be it

"*Resolved:* That the California Medical Association go on record establishing a fee of five dollars to physicians furnishing such service."

. . . Applause. . . .

VICE-SPEAKER CHARNOCK: Referred to Reference Committee No. 3.

Resolution No. 29

DR. H. B. BREITMAN (Los Angeles County): Members of the House of Delegates, I have a resolution here, a survey to be made:

"WHEREAS, Rapidly changing conditions in medical practice and trends have made it necessary for a number of state medical associations to change their former systems of organization and administration, and

"WHEREAS, It is important that before making changes in methods and scopes of activity long in vogue, new methods and procedures should be carefully evaluated, and

"WHEREAS, An objective survey and analysis of both existing and proposed new methods may aid in the elimination of errors, and also promote the saving of money (The Connecticut State Medical Society, for instance, having recently appointed a committee to study the organization and objectives of the Connecticut State Medical Society); now therefore, be it

"*Resolved:* That the California Medical Association through its Council, appoint a committee to study the organization, past and current expenditures, and objectives of the California Medical Association; said committee to consist of one representative chosen by the Council from each of the nine councilor districts, and one representative to be selected by each of the five largest component county societies, together with the President and President-Elect of the California Medical Association. Only the latter two shall be councilors or officers of the California Medical Association; and be it further

"*Resolved:* That the Committee meet at least three times during the coming year, to hear reports from its investigating subcommittees and take such other actions as it may see fit, and that the committee submit a written report on its findings and recommendations to the House of Delegates at its annual session in 1949, a confidential copy, for preliminary study, to be sent to each county medical society at least one month prior to the annual session.

"(Reference to Committee is in Dr. Creighton Barker's article 'Purpose of State Medical Societies' in January or February, 1948; original resolution on page 134 of February, 1947, *Connecticut State Medical Journal.*)"

VICE-SPEAKER CHARNOCK: Referred to Reference Committee No. 3.

Resolution No. 30

DR. L. L. CRAVEN (Los Angeles County): The matter of Life Memberships was brought up this afternoon, and it seems to be worrying quite a few people. Maybe my resolution will help straighten out this difficulty. I am sure you have all been waiting for this particular resolution. It reads:

"WHEREAS, The annual dues of the California Medical Association in the past three years have been so high that much complaint has been made by many members, and

"WHEREAS, The wisdom of many of the large expenditures made by the Council of the California Medical Association, particularly for publicity, radio broadcasts such as *California Caravan*, support of California Physicians' Service, loans to a New Mexico health insurance program, support of the United Public Health League and for other purposes, has been widely questioned, and

"WHEREAS, Present reserves of the California Medical Association are in excess of $800,000, and

"WHEREAS, Reduction of state dues would permit component county societies to increase their dues at their discretion for public relations work at the county level or to meet other local needs; now therefore, be it

"*Resolved:* That the California Medical Association dues for 1949 be set at $30." (Applause.)

VICE-SPEAKER CHARNOCK: Referred to Reference Committee No. 3.

Resolution No. 31

DR. G. W. CALDWELL (Los Angeles County): (Reading)

"WHEREAS, During the past few years, the Council of the California Medical Association, in its desire to carry on an effective public relations program among the citizens of California, has contracted with a public relations firm to furnish certain radio, newspaper and other publicity, such as the *California Caravan* broadcast, the total cost of such activities for the past three calendar years having amounted to $306,400, in addition to the expenditure of some $80,000 by the Council for public relations purposes, and

"WHEREAS, It is becoming more and more obvious that the only firm foundation on which the good will of the public toward the medical profession rests is the friendly personal relationships which exist between physicians and their patients, and in creating which physicians in general practice have so large a role, and

"WHEREAS, It is highly questionable whether any great amount of good will can be purchased through radio broadcasts or newspaper articles, and

"WHEREAS, The system of California Medical Association broadcasts, paid for at great expense from the dues of members, are little if at all superior to the tri-weekly broadcasts of the Los Angeles County Medical Association, done at practically no expense; now therefore, be it

"*Resolved:* That the House of Delegates instruct the Council as follows:

1. That the employment of a public relations firm be discontinued;

"2. That a well-trained director of public relations be employed by the California Medical Organization on a full-time basis whose duties among others it shall be to:

"(a) Organize and carry out a state-wide program designed to instruct practicing physicians as to ways and means of improving their individual relationships with patients and the public;

"(b) Arrange radio broadcasts of such public interest that time will be donated by radio stations;

"(c) Furnish newspapers and other periodicals with material concerning medical activities of interest to the public."

VICE-SPEAKER CHARNOCK: Referred to Reference Committee No. 3.

Resolution No. 32

DR. DAVE DOZIER (Sacramento County): (Reading)

"WHEREAS, Classroom debates are being held in the schools throughout this state on the relative merits of socialized state or federal medicine, and

"WHEREAS, Data against these propositions is at present not well organized or readily available in school libraries or public libraries; now therefore, be it

"*Resolved:* That the Committees on Publications and Education be instructed and empowered to properly prepare and distribute such data to the various schools and public libraries of the state."

VICE-SPEAKER CHARNOCK: This will be referred to Reference Committee No. 3. Are there any more resolutions? Tonight is the last time you may submit resolutions at this session. If there are no resolutions, may we once again read the names of the members of the reference committees.

. . . Whereupon the names of Reference Committee members were then repeated. . . .

VICE-SPEAKER CHARNOCK: Anybody who wishes to appear before those committees should mark those names down.

VICE-SPEAKER CHARNOCK: If there is no further business, we will stand adjourned until tomorrow at 6:30 in this room.

. . . Whereupon, at 11:20 p.m., the meeting of the House of Delegates of the California Medical Association stood adjourned.

SECOND MEETING OF HOUSE OF DELEGATES

Wednesday Evening, April 13, 1948

SPEAKER ALESEN: The house will come to order. Dr. Myers, chairman of the Credentials Committee, will you please come forward? The Chair recognizes Dr. O. R. Myers of Humboldt County, chairman of the Credentials Committee. Dr. Myers, will you give your report please?

DR. MYERS: Mr. Speaker, we have registered 160 duly qualified delegates to be seated in the House of Delegates.

SPEAKER ALESEN: Thank you, Dr. Myers. Mr. Secretary, shall we proceed to call the roll?

(The Secretary called the roll. Several delegates were not present, and alternates were named to take the vacant seats.)

SPEAKER ALESEN: It is now in order to have the Secretary announce the Council's selection of a place for the 1949 annual session.

SECRETARY GARLAND: Mr. Speaker, the Council has selected the City of Los Angeles.

SPEAKER ALESEN: We now proceed to the election of officers. The Chair announces the selection of the following tellers: Dr. Jesse L. Carr of San Francisco, Dr. Dave Dozier of Sacramento, Dr. William Snyder of Los Angeles. Election is by secret ballot. First office to be filled is that of President-Elect. Do we hear nominations for that office?

DR. FELIX R. ROSSI, JR.: Mr. Speaker, members of the House of Delegates. It is with considerable pleasure that I nominate for the position of President-Elect of the California Medical Association John W. Green of Solano County. Most of you know Dr. Green personally. You know of his fine record, but I would like to take just a few minutes to review some of the outstanding highlights of his life and his career, so that some of you who may not know him so well will be a little better informed. In the first place, Dr. Green is especially qualified to be a physician. He comes from a long line of doctors, the original John Green in this country having settled in Rhode Island about 1735, and since that time there has been a doctor in the family, at least one doctor in every generation. Furthermore, Dr. Green's father was a state senator from Indiana in 1915, so that Dr. Green has had considerable association with the legislative side of life as well as the medical side. Now, to proceed to him personally, he graduated from Rush Medical College in 1908, served in the United States Navy for approximately five years, during World War I and until 1922. He has been very active and interested in civic and social activities—a good many. The list is rather long, so I am not going into that at all. Those of you who know him know he is interested in sports, he is quite a dog fancier, a man about town, and he has been a member of three state medical societies, those of Indiana, South Dakota, and California, of the latter since 1922. He has been two times president of our Solano County Society, and five times its secretary. Now, "five times its secretary" speaks pretty well for the man's ability to do a little work, as many of you know who have been secretary of your societies. He has served as delegate to this house a number of times. He has, for the past several years, been the Councilor from our Ninth District. For the last three sessions of the A.M.A., he has been a delegate from the California Medical Association, and only recently, in fact as recently as last week, he represented the American Medical Association on a five-man committee in Chicago on the now pending problem of the American Red Cross Blood Banks; he is also serving on a similar committee for the California Medical Association. Now, in summary, I would like to say that we have without reservation in Dr. Green a man who is very sincere, capable, and dependable, a man who will serve our needs adequately and competently. And I will say this to you delegates, that while you may choose a man as good as John Green, I am sure you could not choose a better man.

SPEAKER ALESEN: The name of John W. Green has been placed in nomination for the office of President-Elect.

DR. MAKAROFF: Fellow delegates, I too come from a cow county, so I feel that those of you who come from the northern part of the state will agree with me that John Green, coming from a cow county, has done a remarkable job for our C.M.A., and I take great pleasure in seconding the nomination of John Green.

SPEAKER ALESEN: Are there additional nominations for the position of President-Elect?

DR. JOSEPHSON: In the course of C.M.A. events there occasionally comes a time when the cow counties as they are sometimes called—the rural districts—have their chance for the presidency. This evening I have the honor of presenting Dr. Stanley Kneeshaw. Dr. Stanley Kneeshaw is from San Jose, Santa Clara County. It seemed as I listened to the story of the biography of these men, we can almost look at them as counterparts. Dr. Kneeshaw himself came from the Rush Medical School. Dr. Kneeshaw came to Santa Clara County right after the First World War. Dr. Kneeshaw started giving his services to the men in the community and to the people in the community as a general practitioner and a doctor. To his fellow practitioners in the community, he gave his aid and his services as an ardent worker in the county, and soon was represented in this assembly as a delegate from the county. Since 1922, with the exception of one term of two years, Stanley has been in this assembly either as a delegate or as a member of Council. For the last three periods of three years each, nine years total, Stanley has been a member of the Council. He has represented the Fifth Council District, and has personally felt the problems of every one of the Counties of San Benito, Santa Clara, Monterey, and Santa Cruz. He has worked faithfully, diligently, and given his time in the representation of these counties. It is with a great deal of pleasure that I bring this man, a general practitioner, who not only feels the needs of the people in the community, but can also represent the feelings and needs of his fellow practitioners, Dr. Kneeshaw.

DR. REYNOLDS: It gives me pleasure to act as an uninstructed delegate from one of the "cow counties" to second the nomination of Dr. Kneeshaw.

DR. BENNINGHOVEN: It gives me great pleasure to second the nomination of Dr. Kneeshaw.

DR. WESSELS: We're 100 percent behind Stanley. He has been a marvelous councilor for our district—Monterey County is wholeheartedly in support of Stanley Kneeshaw.

SPEAKER ALESEN: Are there further nominations for the office of the President-Elect? If not, the nominations will be closed. Voting will be by ballot. The tellers will pass out the ballots. This is ballot number one for the office of President-Elect. Will you please vote on the numbered side of the ballot?

SECRETARY: Mr. Speaker, the house count is now 218 officially seated delegates.

SPEAKER ALESEN: If any delegates have come in since completion of the roll call, they may be seated in place of their respective alternates, if the alternates so request, and of course with the permission of the house.

(The Chair was now turned over to Vice-Speaker Charnock.)

SPEAKER CHARNOCK: Nominations for the office of Speaker of the House of Delegates.

DR. CRANE: I wish to nominate L. A. Alesen as Speaker of the House of Delegates to succeed himself.

SPEAKER CHARNOCK: Are there any other nominations? It has been moved and seconded that the nominations be closed. All those in favor of closing the nominations will say "aye." (General assent.) The contrary? (No nays.) How will you vote for Speaker? It has been moved and seconded that the Secretary cast a ballot for Dr. Alesen. All those in favor of this means of election will say "aye." (General assent.)

SECRETARY GARLAND: Mr. Speaker, the ballot is cast.

(The Chair was now turned over to Speaker Alesen.)

SPEAKER ALESEN: The next office is that of Vice-Speaker of the House of Delegates. Nominations are now in order.

DR. RUSCHE: I wish to nominate to succeed himself my sincere and honest competitor, Dr. Charnock.

SPEAKER ALESEN: Dr. Charnock has been nominated to succeed himself. Are there other nominations? Hearing no further nominations the Chair declares nominations closed. All those in favor of having the Secretary cast a ballot signify by saying "aye." (General assent.) Mr. Secretary, will you please cast a ballot?

SECRETARY GARLAND: Mr. Speaker, the ballot is cast.

SPEAKER ALESEN: Dr. Charnock is elected to succeed himself as Vice-Speaker.

(The Chair was now turned over to Dr. Charnock.)

SPEAKER CHARNOCK: The next office is for District Councilor from the Second District, Dr. Crane's term expiring. We have a written nomination . . . . . Dr. Cosgrove, do you wish to speak for the written nomination?

DR. COSGROVE: I do.

SPEAKER CHARNOCK: May we announce the written nomination first?

SECRETARY GARLAND: Mr. Speaker, we have nominations for councilor to represent District No. 2 of the California Medical Association—Dr. George Caldwell and Dr. J. J. Crane.

SPEAKER CHARNOCK: Dr. Cosgrove now.

DR. COSGROVE: Mr. Speaker, members of the House of Delegates, it gives me great pleasure to present the name of the President-Elect of the General Practitioners Section, also a member of the Los Angeles County Medical Association. He is sincere, conscientious, and able. He was selected by an overwhelming majority at our office on March 30, 1948, and this afternoon this was confirmed by a unanimous decision. I give you the name of Dr. George W. Caldwell.

DR. MULFINGER: Mr. Speaker and members of the House of Delegates. In every organization it is necessary to have his majesty's opposition—loyal opposition, and it gives me great pleasure therefore to renominate for the office of District Councilor from Los Angeles Dr. J. J. Crane. I believe his record speaks for itself. He has been an outstanding man in his specialty on the West Coast. He is well and favorably known throughout the state as well as in his own locality, so it is incumbent upon me to nominate Dr. J. J. Crane on the basis of his record and on the basis of professional attainment.

DR. BREITMAN: I wish to second the nomination of Dr. George Caldwell. He has been a friend of twenty years who has been a friend to the general practitioners and specialists alike without partiality.

SPEAKER CHARNOCK: We have the two names for District No. 2—Dr. George Caldwell and Dr. J. J. Crane. It will be voted on ballot No. 2. We will pass these ballots out. You are voting now on Councilor District No. 2, and please vote on the numbered side. While you are passing in those ballots, which we hope you will do rapidly, we will ask the Secretary to announce the vote on President-Elect.

SECRETARY GARLAND: Mr. Speaker, the voting is Dr. Kneeshaw, 127; Dr. Green, 89.

SPEAKER CHARNOCK: Will Dr. Kneeshaw and Dr. Green come to the head of the table?

DR. GREEN: I should like to move that the election be made unanimous for Dr. Kneeshaw.

DR. KNEESHAW: All I have to say is that I thank you very much.

SPEAKER CHARNOCK: Are all the ballots in for the second ballot? We will pass now to the Fifth District.

SECRETARY GARLAND: Mr. Speaker, delegates of the Fifth Councilor District have submitted the name of Dr. Ray of San Mateo County.

SPEAKER CHARNOCK: Dr. Hartzell Ray of San Mateo County has been put in nomination. This nomination comes from the Fifth District, and Dr. Hartzell Ray will be put in nomination. We will have to vote on Dr. Ray. How will you vote? It has been moved the Secretary cast the ballot. All those who are in favor will say "aye." (General assent.)

SECRETARY GARLAND: Mr. Speaker, the ballot has been cast.

SPEAKER CHARNOCK: Dr. Ray is elected. Next is the Eighth District.

SECRETARY GARLAND: Mr. Speaker, we have one starter, and two scratches, Dr. Wayne Pollock of Sacramento is nominated for the Eighth District, Dr. Frank MacDonald nominated and withdrawn. Dr. John Lindstrum, I have been informed, is nominated and withdrawn. Dr. Lindstrum is in the audience, Mr. Speaker, and perhaps he will verify that or correct it.

DR. LINDSTRUM: I withdraw.

SPEAKER CHARNOCK: Dr. Wayne Pollock has been nominated for the Eighth Councilor District. That is the sole nomination, Mr. Secretary?

SECRETARY GARLAND: Correct.

SPEAKER CHARNOCK: How will you vote? It has been moved the Secretary cast a ballot. All those in favor say "aye." (General assent.)

SECRETARY GARLAND: Mr. Speaker, the ballot is cast.

SPEAKER CHARNOCK: Dr. Wayne Pollock has been elected from the Eighth Councilor District. The next is for Councilor-at-Large, Walter S. Cherry's term expiring.

DR. MARTIN: Mr. Speaker and delegates. It is indeed a pleasure for me to nominate Walter S. Cherry to succeed himself as delegate-at-large. Dr. Cherry has been a member of the San Bernardino Medical Society for the past 24 years. He is the past President of that organization. He has served in the House of Delegates for approximately 14 years, and has been a member of the Council for the past three years, and has not missed one of the regular Councilor meetings. Therefore, I place before you the name of Dr. Walter Cherry.

SPEAKER CHARNOCK: The name of Dr. Cherry has been placed in nomination as Councilor-at-Large. Do I hear any other nominations? How will you vote? It has been moved and seconded that the Secretary cast a ballot. All those in favor will say "aye." (General assent.)

SECRETARY GARLAND: Mr. Speaker, the ballot is cast.

SPEAKER CHARNOCK: Dr. Cherry has been elected. Next in order is to nominate another Councilor-at-Large, H. Gordon MacLean's term expiring.

DR. FRASER: Mr. Speaker and delegates. You have already heard so much from the cow counties tonight. Inasmuch as we have elected a President from the cow counties, I hate to impose on your indulgence, but I do, on behalf of Contra Costa County which is really at the gate to the corral, at least of the pastures of San Jose, Santa Clara, and all these counties up there, nominate for delegate-at-large Dr. Gordon MacLean from Oakland. Dr. MacLean, as you know, has been a work horse in the Councilor District for many years. He is also the delegate from our two counties to the A.M.A., and I think that the boys from the agricultural, industrial, and cow punching counties would like to ask your support in his behalf.

SPEAKER CHARNOCK: Dr. Gordon MacLean has been placed in nomination as Councilor-at-Large. Do I hear any other nominations? The Chair hearing none declares the nominations closed. How will you vote? It has been moved and seconded that the Secretary cast the ballot. All those in favor will signify by saying "aye." (General assent.) The ayes have it.

SECRETARY GARLAND: The ballot has been cast.

SPEAKER CHARNOCK: Dr. H. Gordon MacLean of Oakland has been elected. Position of Eugene F. Hoffman of Los Angeles—unexpired term. Dr. Hoffman was nominated—was elected by the Council to fill an unexpired term, and must be re-elected—or the office must be refilled at this election. Do I hear any nominations?

DR. SAMPSON: It is a pleasure for me to nominate my friend, Eugene Hoffman, to succeed himself in this office as Councilor-at-Large. As you heard, he has for one year filled an unexpired term, and was appointed by the Council. A man who has been in one year has just gotten his teeth into the situation, and I think that all of us will agree he will be a better Councilor if he continues for a full term.

SPEAKER CHARNOCK: Dr. Eugene Hoffman has been nominated.

DR. MEALS: I would like to nominate a man who has been outstanding as a general practitioner. He is this year's President of the Section on General Practice in Los Angeles. He is not only a doctor, but a business man, and a good House executive. I would like to nominate Dr. Fred Gaspard.

SPEAKER CHARNOCK: Dr. Fred Gaspard has been nominated.

DR. BALL: Gentlemen, I'd like to second the nomination of Dr. Gaspard. It has been my pleasure to work with him for the last year or so, as Chief of the Hospital Staff, and I think that any man that ever worked with Fred Gaspard would know that he is just tops. We all respect the fact that he doesn't live in Los Angeles, but in Glendale, but he still is a very active man, a very fine man, and I think all of us that come from that district feel that Fred Gaspard is the coming man in that district from all political aspects.

DR. BREITMAN: Dr. Gaspard has been the unanimous choice of the Los Angeles delegates. I take great pleasure in seconding his nomination.

DR. BAILEY: Mr. Speaker and delegates, we have had the chance to watch Dr. Hoffman. By this time we have seen how able he is, and how well he works. I think it would be a great credit to ourselves to return him to the Council for another term.

SPEAKER CHARNOCK: Do we have any more nominations? It has been moved and seconded that the nominations be closed. All those who are in favor of closing the nominations will say "aye." (General assent.) Nominations are closed. Dr. Hoffman and Dr. Gaspard on ballot No. 3. We have the report on ballot No. 2.

SECRETARY GARLAND: Mr. Speaker, in the first election this evening there were 216 votes cast. In the second election there were 216 votes cast. Dr. Crane, 121; Dr. Caldwell, 95.

SPEAKER CHARNOCK: The next elections are going to be of delegates and alternates to the American Medical Association. We will remind you that delegates and alternates to the American Medical Association must have been fellows of the American Medical Association for the past two years. The next office to be filled is delegate to the American Medical Association, Dr. H. Gordon MacLean's term expiring.

DR. TRUMAN: Mr. Speaker, members of the House of Delegates. It is my honor to nominate Dr. H. Gordon MacLean to succeed himself. He is enthusiastic, energetic, and capable. He has represented us all well. I need not point out to this House the advantages of a man's continuing in this position. He is a Councilor, he has had experience. It is therefore, again with pleasure, that I nominate H. Gordon MacLean to succeed himself.

SPEAKER CHARNOCK: Dr. H. Gordon MacLean has been placed in nomination. Are there any further

nominations for this position? It has been moved and seconded that the nominations be closed. Those in favor will signify by saying "aye." (General assent.)

SECRETARY GARLAND: Mr. Speaker, the ballot is cast.

SPEAKER CHARNOCK: Dr. MacLean is elected. Next office is that of E. Vincent Askey, Los Angeles, term expiring. Nominations are in order for this office.

DR. MULFINGER: Mr. Chairman and members of the House of Delegates. I beg your indulgence to be up here twice. I'm not running for any office or I'd have pressed my suit. It is such a happy occasion for me to nominate my old colleague Dr. E. Vincent Askey, your President-Elect—practically President now—for the office of delegate to the American Medical Association.

SPEAKER CHARNOCK: Dr. E. Vincent Askey, President-Elect, has been placed in nomination. Are there any other nominations? It has been moved and seconded that the nominations be closed. Those in favor of this will say "aye." (General assent.) Nominations are closed. How will you vote? It has been moved and seconded that the Secretary cast the ballot. All those who are in favor will say "aye." (General assent.)

SECRETARY GARLAND: Mr. Speaker, the ballot is cast.

SPEAKER CHARNOCK: The ballot is cast. Dr. E. Vincent Askey has been elected. The next office to be filled is that of John W. Cline, San Francisco, term expiring.

DR. WARD: Mr. Speaker, members of the House of Delegates. I don't know anything that gives me as much pleasure as to nominate John Cline to succeed himself. Having had the experience of attending the American Medical Association House of Delegates as a delegate, I have had a chance to see what an effective man John Cline is. I can tell you that he is the top man in the House of Delegates to the American Medical Association, and it gives me great pleasure to nominate him to succeed himself.

DR. DIEPENBROCK: Mr. Speaker, members of the House of Delegates. It gives me extreme pleasure to second the nomination of Dr. John Cline.

SPEAKER CHARNOCK: Are there any further nominations for this office? It has been moved and seconded that nominations be closed. All those who are in favor will signify by saying "aye." (General assent.) The nominations are closed. How will you vote? It has been moved and seconded that the Secretary cast a ballot. All those in favor will say "aye." (General assent.)

SECRETARY GARLAND: Mr. Speaker, the ballot is cast.

SPEAKER CHARNOCK: Dr. Cline has been elected. The next office is that of Donald Cass, Los Angeles, term expiring.

DR. FOSTER: Mr. Speaker, it gives me pleasure to nominate Dr. Donald Cass to succeed himself.

SPEAKER CHARNOCK: Are there any further nominations? It has been moved and seconded the nominations be closed. All those in favor signify by saying "aye." (General assent.) The nominations are closed. How will you vote? It has been moved and seconded that the Secretary cast a ballot. All those in favor will signify by saying "aye." (General assent.)

SECRETARY GARLAND: Mr. Speaker, the ballot is cast.

SPEAKER CHARNOCK: Dr. Cass has been elected. The next office is that of Ralph B. Eusden, Long Beach, term expiring.

DR. FOSTER: Mr. Speaker, members of the House of Delegates. I am proud to nominate a man from Los Angeles County Hospital, the Secretary of the Council, Secretary of the Los Angeles County Medical Association. He is President of the State Board of Medical Examiners, and a man who has given unstintingly of his time and energy for the medical profession. I wish to nominate Dr. Richard O. Bullis.

DR. CRANE: It gives me great pleasure to nominate Ralph B. Eusden to succeed himself as delegate to the A.M.A. Ralph has served one term. He was an alternate from our district, the Los Angeles County District for several terms, and is untiring. He has been on the Council of the Los Angeles County Medical Association, and is one of the members of its Board of Trustees.

SPEAKER CHARNOCK: Dr. Ralph Eusden has been placed in nomination.

DR. WARD: Mr. Speaker, members of the House, it gives me great pleasure to second the nomination of Ralph Eusden. If you could see the team that your Medical Association has working for you at the A.M.A. House of Delegates, you could realize that it takes a little while to get on to the ropes, and know what it's all about. It takes a little while to make friends and influence people. Ralph Eusden attended the last House of Delegates meeting, and made friends, and is now in a position to give us real good service. It gives me pleasure to second his nomination.

SPEAKER CHARNOCK: Are there any other nominations? The Chair, hearing none, declares the nominations closed. You will vote on ballot No. 4. While the ballots are being passed out, we will ask the Secretary to report on ballot No. 3.

SECRETARY GARLAND: Mr. Speaker, there were 213 ballots cast. Dr. Gaspard, 81; Dr. Hoffman, 132.

SPEAKER CHARNOCK: This is Ballot 4 you are voting on. Dr. Richard Bullis and Dr. Ralph Eusden. Be sure to vote on the numbered side. According to Robert's Rules of Order, you fold your ballot once. The next are the alternates to the American Medical Association. Leopold H. Fraser, alternate to Gordon MacLean, term expiring. Nominations are now in order.

DR. REYNOLDS: Mr. Speaker, members of the House of Delegates. It seems that as the price of beef and butter goes up, cows are mentioned much more frequently. This of course is the second team in the

matter of representation at the A.M.A. It is with great pleasure that I place in nomination the name of L. H. Fraser who has been the incumbent as alternate to Gordon MacLean all of his terms. Paul Fraser, as he is called by his friends, as past president of Contra Costa Medical Society—by the way, Contra Costa County is the only place the cows have to go if they don't walk into the Bay when they leave Alameda County—has sat on the bench all dressed up in a suit for all these years. He has never had a chance to run with the ball because Gordon MacLean has been too healthy. I again take great pleasure in placing his name in nomination.

SPEAKER CHARNOCK: Dr. L. H. Fraser has been placed in nomination. Are there any other nominations? If not, it has been moved and seconded that the nominations be closed. All those in favor signify by saying "aye." (General assent.) How will you vote? It has been moved and seconded that the Secretary cast a ballot. All those in favor will signify by saying "aye." (General assent.)

SECRETARY GARLAND: Mr. Speaker, the ballot is cast.

SPEAKER CHARNOCK: Dr. L. H. Fraser has been elected. The next is alternate to E. Vincent Askey, term of William Benbow Thompson, Los Angeles, expiring.

DR. CRANDALL: Mr. Speaker, members of the House of Delegates, I am very pleased to present the name of a man that most of you know, and certainly those of us in Los Angeles County know very well. That is the name of Dr. William H. Leake, who is, at the present time, the President of the Los Angeles County Medical Association. After having served a long term in the Navy as captain in the Navy Medical Corps, he will make us a very fine man in setting up to go to the A.M.A.

SPEAKER CHARNOCK: Dr. Leake has been placed in nomination. Are there any other nominations? It has been moved and seconded that the nominations be closed. All those in favor will signify by saying "aye." (General assent.) The nominations are closed. How will you vote? It has been moved and seconded that the Secretary cast a ballot. All those in favor signify by saying "aye." (General assent.)

SECRETARY GARLAND: Mr. Speaker, the ballot for Dr. Leake is cast.

SPEAKER CHARNOCK: Dr. Leake has been elected as alternate to E. Vincent Askey. The next is C. Kelly Canelo, San Jose, alternate to John W. Cline, term expiring.

DR. MAGOON: It is my privilege on behalf of the delegates from Santa Clara County to nominate to succeed himself Dr. C. Kelly Canelo of San Jose.

SPEAKER CHARNOCK: Dr. Canelo has been placed in nomination. Are there any further nominations? It has been moved and seconded the nominations be closed. All those in favor will signify by saying "aye." (General assent.) How will you vote? It has been moved the Secretary cast a ballot. All those in favor will signify by saying "aye." (General assent.)

SECRETARY GARLAND: Mr. Speaker, the ballot for Dr. Canelo is cast.

SPEAKER CHARNOCK: Dr. Canelo is elected. The next is alternate to Donald Cass. Carl L. Mulfinger incumbent through Council appointment. This will have to be voted on at this meeting. Nominations for alternate to Donald Cass are in order.

DR. BAILEY: I should like to nominate for this position Dr. Carl L. Mulfinger.

SPEAKER CHARNOCK: Dr. Mulfinger has been placed in nomination.

DR. MULFINGER: Mr. Speaker, I would like to withdraw my name.

SPEAKER CHARNOCK: Dr. Mulfinger wishes to with draw his name. Nominations for alternate to Dr. Donald Cass are in order.

DR. RUSCHE: Mr. Speaker, House of Delegates, I wish to nominate Dr. Duke Mahannah, Long Beach.

SPEAKER CHARNOCK: Are there any other nominations? It has been moved and seconded that the nominations be closed. All those in favor will signify by saying "aye." (General assent.) The nominations are closed. How will you vote? It has been moved and seconded the Secretary cast a ballot. All those in favor will signify by saying "aye." (General assent.)

SECRETARY GARLAND: Mr. Speaker, the ballot is cast.

SPEAKER CHARNOCK: Dr. Mahannah has been elected. Dr. Elizabeth Mason-Hohl was elected last year on a new office, No. 9. She was the alternate to Dr. Ralph B. Eusden. First let us have the Secretary read the announcement of the ballot No. 4.

SECRETARY GARLAND: There were 216 votes cast. Dr. Eusden, 140; Dr. Bullis, 76.

DR. BARROW: Members of the House of Delegates. It gives me both great honor and great pleasure to nominate Dr. Elizabeth Mason-Hohl to succeed herself.

DR. FRANKLIN: Mr. Speaker, House of Delegates. I wish to join in the nomination by seconding the name of Elizabeth Mason-Hohl.

SPEAKER CHARNOCK: The name of Elizabeth Mason-Hohl has been placed in nomination. Are there any further nominations? It has been moved and seconded that the nominations be closed. All those in favor will signify by saying "aye." (General assent.) The nominations are closed. How will you vote? It has been moved and seconded the Secretary will again cast the ballot. All those in favor will signify by saying "aye." (General assent.)

SECRETARY GARLAND: Mr. Speaker, the ballot for Dr. Elizabeth Mason-Hohl is cast.

SPEAKER CHARNOCK: Dr. Elizabeth Mason-Hohl has been elected. The next is alternate to John W. Green, Frank A. MacDonald, incumbent through Council appointment, for term ending December 31, 1949.

DR. MAKAROFF: Delegates, a year ago I had the honor of being elected to this position by the dele-

gates in Los Angeles. Three months later, the Council had the distinct pleasure of informing me that I could not serve because I did not have the pink slip. I take great pleasure in nominating for the position of alternate a fellow practitioner from Humboldt County, Dr. Orris Myers.

DR. DUFFICY: I take great pleasure in seconding the nomination of Dr. O. R. Myers as alternate to John Green to the A.M.A.

DR. THOMPSON: Mr. Speaker, delegates, it gives me pleasure to nominate Frank A. MacDonald of Sacramento to succeed himself.

SPEAKER CHARNOCK: Dr. Frank A. MacDonald has been placed in nomination. Are there any further nominations? The Chair, hearing none, declares the nominations closed. This will be Ballot No. 5. You are voting on Ballot No. 5.

We will declare a recess for the C.P.S. Will the C.P.S. Trustees come forward to the platform?

(The Chair was now taken over by President of the California Physicians' Service, Dr. Lowell S. Goin.)

(House of Delegates, reconvened.)

SPEAKER ALESEN: The Secretary will announce the last vote.

SECRETARY GARLAND: The last ballot: Dr. MacDonald, 119; Dr. Myers, 81.

SPEAKER ALESEN: The next item is the announcement by the Secretary of Council's nominations of members of standing committees for approval by the House. Mr. Secretary, will you please so announce?

SECRETARY GARLAND: Mr. Speaker, the following additional members or replacements are appointed: Associated Societies and Technical Groups, Dr. Phillip Sampson, Santa Monica; Health and Public Instruction, Dr. Harold Chope, San Mateo; History and Obituaries, Dr. Robert A. Peers, Colfax; Dispensaries and Clinics, Dr. F. E. Jacobs, San Diego; Industrial Practice, Dr. Donald Cass, Los Angeles; Medical Defense, Dr. Cyril Attwood, Oakland; Medical Economics, Dr. H. Gordon MacLean, Oakland; Medical Education and Medical Institutions, Dr. L. R. Chandler, San Francisco; Organization and Membership, Dr. John Lindstrum, Marysville; Postgraduate Activities, Dr. John C. Ruddock, Los Angeles; Publications, Dr. Joseph Woolford, Eureka; Public Policy and Legislation, Dr. Anthony Diepenbrock, San Francisco; Scientific Work, Dr. Howard West, Los Angeles; Committee on Public Relations reappointed in accordance with the Constitution.

SPEAKER ALESEN: It has been moved and seconded these Council appointments be approved. Any discussion? All those in favor signify by saying "aye." (General assent.) Approved.

DR. ASKEY: Mr. Speaker, there is only one prerequisite of the President-Elect of the California Medical Association, and that is to appoint the members of the Cancer Commission. It is my pleasure to reappoint Dr. Ullman of Santa Barbara, Dr. D. Wood of San Francisco, Dr. John Cline of San Francisco, and I hereby reappoint Dr. Lyell C. Kinney as chairman of the Cancer Commission.

SPEAKER ALESEN: We will now proceed to the reports of the Reference Committees. Committee No. 1, Dr. Frees, Chairman.

DR. FREES: Mr. Speaker, members of the House. May I digress to thank Dr. Doughty of Tracy, and Dr. Martin of San Bernardino for their very fine assistance on this Committee. Picking up Section 1, your committee has reviewed the reports of the General Officers, the Councilors, the Legal Department, and the Editor of CALIFORNIA MEDICINE. The courageous and intelligent leadership of the Officers of the California Medical Association during the past year should command the respect and appreciation of every member of the California Medical Association. They have put service before self. Their reports have been printed in the Pre-Convention Bulletin, copies of which have been given to all members of the House, and have been supplemented by an oral report given by Legal Counsel at the opening meeting of the House. Your committee recommends the approval of these reports. Mr. Speaker, I move the adoption of this section of the report.

SPEAKER ALESEN: Is there a second? (Seconded.) Is there any discussion? All those in favor signify by saying "aye." (General assent.) It is so ordered.

DR. FREES: Section 2: The committee has carefully reviewed the reports of the following: Executive Committee, Auditing Committee, Committee on History and Obituaries, Committee on Publications, Committee on Health and Public Instruction, Committee on Industrial Practice, Committee on Medical Education and Medical Institutions, Committee on Scientific Work, Cancer Commission, Advisory Planning Committee, Committee on Organization and Membership, Committee on Associated Societies and Technical Groups, Editorial Board of CALIFORNIA MEDICINE, Committee on Local Arrangements, and the Physicians' Benevolence Committee. Your committee recommends the approval of these reports. Mr. Speaker, I move the adoption of this section of the report.

SPEAKER ALESEN: There is a second. Any discussion? All those in favor signify by saying "aye." (General assent.) It is so ordered.

DR. FREES: Section 3: The committee has also reviewed the report of the Committee on Public Policy and Legislation supplemented by an oral report to the House of Delegates in Executive Session by Dwight Murray, M.D., chairman. We recommend the acceptance of this report and we recommend that Dr. Murray be wholeheartedly commended by this House for his untiring and effective efforts on our behalf. Mr. Speaker, I move the adoption of this section of the report.

SPEAKER ALESEN: Any discussion? All those in favor say "aye." (General assent.) So ordered.

DR. FREES: Section 4: Our committee recommends the adoption of the report of the Committee on Hos-

pitals, Dispensaries and Clinics as submitted by Carroll B. Andrews, M.D., chairman, and supplemented by his written and oral reports to this committee, and further recommends that the House of Delegates empower the present committee to continue its research with the other allied groups and attempt to influence the State Department of Public Health and Medical Schools to put this program in operation; and further recommends that it be commended for its work to date. Mr. Speaker, I move the adoption of this section of the report.

SPEAKER ALESEN: Is there a second? (Seconded.) Any discussion? All those in favor signify by saying "aye." (General assent.) So ordered.

DR. FREES: Section 5: Your committee recommends the adoption of the report of the Committee on Medical Economics as submitted by H. Gordon MacLean, M.D., chairman, and it further recommends the adoption of the printed final report of the Committee which has been placed in the hands of every delegate; and further that the seven recommendations of this committee as outlined in the final report be adopted and carried out; and further that this committee be highly commended for its untiring efforts. Mr. Speaker, I move the adoption of this section of the report.

SPEAKER ALESEN: Is there a second? (Seconded.) Any discussion? All those in favor signify by saying "aye." (General assent.) So ordered.

DR. FREES: Your committee recommends the adoption of the report of the Committee on Rural Medical Service as submitted by Carroll B. Andrews, M.D., chairman, and supplemented by his oral report to your committee. We recommend that a second annual Rural Health Conference be held within four to six months and further that the scope of the Rural Medical Service Committee be increased and broadened. Mr. Speaker, I move the adoption of this section of the report.

SPEAKER ALESEN: All those in favor signify by saying "aye." (General assent.) So ordered.

DR. FREES: Section 7: Your committee recommends the adoption of the report of the Postgraduate Committee, as submitted by John C. Ruddock, M.D., chairman, and supplemented by his oral report to this Reference Committee. There is need for postgraduate training for 2,500 doctors in the rural districts of this state, since it is not convenient for them to attend courses in the metropolitan centers. These doctors are not interested in Specialty Board qualification, but desire to improve their knowledge in the field of medicine. We therefore recommend that comprehensive material should be made available to physicians gathered from outlying districts, that digests of important advances in general medicine and surgery should be presented to them, that lecturers from medical schools and hospitals should conduct seminars, discussions, and clinics at 15 rural medical centers; and that this House of Delegates should vote necessary funds not to exceed $18,000 to carry out this program. Mr. Speaker, I move the adoption of this section.

SPEAKER ALESEN: Is there a second? (Seconded.) Is there discussion? The House should note that this is a recommendation that the Council appropriate a sum of money not to exceed $18,000 in connection with this work. All those in favor signify by saying "aye." (General assent.) Carried.

DR. FREES: The committee has also reviewed the reports of two special committees which were established by action of the 1947 House of Delegates. These are the Committee on Redistricting of Councilor Districts, under the chairmanship of G. Dan Delprat, M.D., and the Committee on Constitution and By-Laws, under the chairmanship of Sam J. McClendon, M.D. Section 8: The Committee on Redistricting of Councilor Districts was appointed by the Council in accordance with the resolution adopted by this House last year and consisted of one representative from each of the nine councilor districts, none of whom was a member of the C.M.A. Council. This committee has studied thoroughly the distribution of councilor districts among the 58 counties of the state and has rendered a unanimous report to the effect that the present councilor districts should be maintained. Your committee concurs with the recommendations of this special committee. Mr. Speaker, I move the adoption of this section of the report.

SPEAKER ALESEN: Is there a second? (Seconded.) Any discussion? All those in favor signify by saying "aye." (General assent.) So ordered.

DR. FREES: Section 9: The Committee on Constitution and By-Laws was appointed by the Council in accordance with the resolution adopted by this House last year and consisted of one representative from each of the nine councilor districts and one member appointed by each of the seven largest component county medical societies, none of whom was a member of the C.M.A. Council. This committee has held several meetings as a committee as a whole and numerous meetings of subcommittees appointed to study the various divisions of the entire subject of the Constitution and By-Laws. The committee has presented a complete draft of the proposed Constitution and By-Laws which are designed to add greater flexibility to the management and conduct of affairs of the Association and which contained numerous suggestions for different methods of election of officials and administration of the C.M.A. Numerous witnesses appeared before the Reference Committee to urge the adoption or rejection of certain controversial items in this proposed Constitution and By-Laws. There was unanimous opinion of all those appearing before the Reference Committee that, first, the Association should work for the adoption of a new Constitution and By-Laws and, second, that the subject is so broad and so important a new document should not be adopted without a thorough study. Therefore, your committee recommends that the Council appoint a committee of five members to study the Constitution and By-Laws prepared by this special committee and to report back to the House of Delegates at its next regular meeting. Your committee further recommends that the proposed Constitu-

tion and By-Laws be published in the official journal and that all members of the Association be urged to indicate their views on any item to the committee. Your committee wishes to commend the members of this special committee and especially commend legal counsel for an outstanding piece of work which has been arduous and performed under time limitations imposed by the early meeting of the House of Delegates this year. Mr. Speaker, I move the adoption of this section of the report.

SPEAKER ALESEN: Moved and seconded this section of the report be adopted. Is there any discussion? All those in favor signify by saying "aye." (General assent.) It is so ordered.

DR. FREES: Mr. Speaker, I move the adoption of the report as a whole.

SPEAKER ALESEN: Moved and seconded. Is there any discussion? All those in favor signify by saying "aye." (General assent.) So ordered. Next is the report of Reference Committee No. 2, Chairman Dr. William G. Donald, Alameda County.

DR. DONALD: Mr. Speaker, members of the House of Delegates. Reference Committee No. 2 approached its task with respect and appreciation of the unselfish and tremendous amount of work that the Council and the Secretary and the Executive Secretary performed. Reference Committee No. 2 has faithfully reviewed the report of Council of the C.M.A., and its supplemental report. This Committee recommends its acceptance as submitted. Mr. Speaker, I so move.

SPEAKER ALESEN: Moved and seconded. Is there any discussion? All in favor signify by saying "aye." (General assent.) It is so ordered.

DR. DONALD: In accordance with the recommendations of the Council contained in its supplemental report, I now move that, if the House adopts the Constitutional amendment permitting reduction of dues in special cases (illness, postgraduate study, first five years of practice), the power to fix the amount of the reduction and the procedure for obtaining the same is hereby delegated to the Council. Mr. Speaker, I so move.

SPEAKER ALESEN: This provides a mechanism for the fixing of the dues, in case the House adopts the Constitutional amendment, which we will consider later. Is there discussion? All those in favor signify by saying "aye." (General assent.) It is so ordered.

DR. DONALD: Reference Committee No. 2 has diligently reviewed and discussed the report of the Secretary-Treasurer, and the Executive Secretary, and finds them in order and duly audited by satisfactory auditors. This committee approves the report and recommends its acceptance as published. Mr. Speaker, I so move.

SPEAKER ALESEN: Any discussion? All those in favor signify by saying "aye." (General assent.) It is so ordered.

DR. DONALD: I move the acceptance of the report as a whole.

SPEAKER ALESEN: All those in favor signify by saying "aye." (General assent.) Reference Committee No. 2's report is adopted. The next is the report of Reference Committee No. 3. Dr. Robertson Ward of San Francisco, chairman.

Constitutional Amendments

DR. WARD: Mr. Speaker, members of the House of Delegates. Distributed among you are the proposed amendments to the Constitution as published unchanged, and it will be my duty to tell you what changes and recommendations we have made in these resolutions. I want to say that Reference Committee No. 3 has considered and made recommendations on six proposed Constitutional changes and 32 resolutions. This, I believe, has been one of the largest assignments ever handed to Committee No. 3. I wish to take this opportunity to thank my committee members for their most efficient and painstaking efforts, which consumed two days, and to let you know that all decisions which I am about to give you were unanimous by your committee. If you will turn to page 6 of the Annual Report Bulletin I will briefly outline the proposed changes in the Constitution which have lain on the table for a year, and upon which you are to vote tonight. The Constitutional Amendments which we are going to act upon first are not on the mimeographed sheets that are being distributed at the present time, but they are in the Pre-Convention Bulletin. Whether you have it or not I can explain the changes so that you will know what they are, and what you are voting on. As you know, Constitutional Amendments cannot be altered in any respect so that you are voting for confirmation of the amendments as published a year ago, and again in the Pre-Convention Bulletin. The first Constitutional Amendment, relating to annual assessments, has been changed by rearrangement so that sections "b" and "c" relating to dues, war service, and reduction of dues in special cases, have been added. Your committee approves of this Constitutional Amendment as published. Mr. Speaker, I move the adoption of this section of the report.

SPEAKER ALESEN: As you know, the adoption of Constitutional Amendments requires a two-thirds vote. There is no rule requiring that the vote be taken by ballot unless you so wish. How do you wish to vote upon this Constitutional Amendment—by voice? Is there any discussion upon this Committee's report? It recommends a favorable action on this Constitutional Amendment. Do you wish to discuss it? If not, are you ready to vote upon the Constitutional Amendment? All those in favor signify by saying "aye." (General assent.) It is carried.

DR. WARD: The second Constitutional Amendment has been changed in the second line of the second paragraph where the word "may" has been substituted for "shall" and now reads "Life members of the California Medical Association may be elected by the Council." In the tenth line of the same paragraph, following $150 in parentheses, has been added "or such other sum as the House of Delegates may from time to time determine." This same clause has been added after classifications 2 and 3 of life mem-

berships. Those are the entire changes in this Constitutional Amendment. Your committee recommends the adoption of this Constitutional Amendment. Mr. Speaker, I move the adoption of this section of the report.

SPEAKER ALESEN: Is there a second? Is there discussion? Are you ready to vote upon this Constitutional Amendment recommended by the Committee? All those in favor of its adoption signify by saying "aye." (General assent.) It is so ordered.

DR. WARD: Constitutional Amendment No. 3 referring to the rights of active members has added a paragraph beginning in the next to the bottom line on page 7 and refers to the ineligibility of members of the medical association to hold office or to be members of the House of Delegates when they are employed by the C.M.A. or any of its component units. Your committee recommends the adoption of this Constitutional Amendment. Mr. Speaker, I move the adoption of this section of the report.

SPEAKER ALESEN: Is there a second? Do you wish to discuss this Constitutional Amendment? There is no thought of hurrying you through. If you want to talk, say so. All those in favor signify by saying "aye." (General assent.) It is so ordered.

DR. WARD: The fourth amendment to the Constitution which you will find in the middle of the right hand column on Page 7, adding "(g) Additional Classes of Membership," makes it possible to include house staffs, interns and medical students in a group of special members. Your committee approves the adoption of this amendment to the Constitution with the authorization by this House to the Council of the C.M.A. to implement this section by setting the dues for this type of membership at $3.00 per year for which the special member will receive a subscription to CALIFORNIA MEDICINE. Your committee proposes that the Council shall be directed to take such action as to effect enrollment of this special class of members at the earliest possible opportunity. May I say that in your mimeographed copies, it says $2.00 a year. On the advice of the Executive Secretary I have changed that to $3.00 a year because the postal regulations state that in order to deliver CALIFORNIA MEDICINE as second or third class mail, whichever it is, at least half of the subscription price will have to be charged so that the $3.00 recommended is different from what you see on this mimeographed sheet. The committee recommends the adoption of this Constitutional Amendment with the recommendations added. Mr. Speaker, I move the adoption of this section of the report.

SPEAKER ALESEN: Dr. Ward, will you clarify that? You are making a change in the original dues, aren't you?

DR. WARD: No, I'm not making any change in the Constitutional Amendment. I'm just implementing it, carrying out the provisions of the amendment by having the House at this time grant power to the Council to assess the dues and get the program in operation.

SPEAKER ALESEN: You're not in any manner proposing a change in the phrasing of the amendment? Is there a second? Any discussion? Pardon me; let's make it very clear. These amendments must be adopted by a two-thirds vote. I just want the record to show that. All in favor say "aye." (General assent.) It is so ordered.

DR. WARD: The fifth amendment on page 7 of the bulletin adds the classification of inactive membership and states the qualifications of the same. Your committee approves the adoption of this amendment. Mr. Speaker, I move the adoption of this section of the report.

SPEAKER ALESEN: Moved and seconded. Is there any discussion? All those in favor signify by saying "aye." (General assent.) The amendment has been passed by more than two-thirds vote.

DR. WARD: Constitutional Amendment No. 6, at the bottom of page 7, permits of the waiving of dues during service in the armed forces or for other causes when so recommended by the constituent county society. Your committee favors the adoption of this amendment to the Constitution. Mr. Speaker, I move the adoption of this section of the report.

SPEAKER ALESEN: Moved and seconded. Is there discussion?

DR. BRUCK: Dr. Ward, Mr. Speaker, members of the House. We have just passed over here a Constitutional Amendment which has to do with the reduction of dues in special cases, and then if you will read carefully Amendment No. 6, you will see that it reads as follows: "That the Constitution of the California Medical Association shall be amended: By changing Article XI, Section 1, Paragraph 2, thereof, to read as follows: "Annual dues to be reduced or waived with respect to those members serving in the armed forces of the United States during the whole or any part of any year." So far, so good; but then: "In respect to any member for any cause, upon the recommendation of the Council or Executive Board or body of the respective member's component county medical association or society." Then it goes on to the next portion, which has now been changed by Constitutional Amendment No. 1, and inasmuch as we cannot delete this—these last two clauses, "and in respect to any member for any cause, upon the recommendation of the Council or Executive Board or body," and "County Medical Society or Association" the amendment would then give the Council or Executive Board of any component County Medical Association or Society the right to fix the State Association dues. Therefore, I would ask you to think very carefully, and then, after you have done that, to vote "no."

SPEAKER ALESEN: Any further discussion?

DR. WARD: I'd like to hear from legal counsel.

MR. HASSARD: Mr. Speaker, I believe that Dr. Bruck pointed out the inconsistencies of the last part of the particular amendment with the first amendment the House adopted just a few moments ago. The very first amendment recasts the entire Section

1 of Article XI in the Constitution, and this particular amendment now before you would in turn change one paragraph of the section that you have already adopted a few moments ago, and would leave undetermined who would be able to fix state dues for any member for any cause.

DR. WARD: I regret to say that Reference Committee No. 3 did not notice the inconsistencies, and I hope you take Dr. Bruck's advice.

SPEAKER ALESEN: Are you ready for the question? All those in favor of this Constitutional Amendment, signify by saying "aye." (General dissent.) The amendment is lost.

Action on Resolutions

DR. WARD: For the convenience of the members of the House, and in order to conserve your time to the best of our ability the committee has had mimeographed and placed in your hands the original resolutions as introduced in the first session of the House of Delegates. In many instances the committee recommended adoption of the resolution unchanged, and with the permission of the House I would like to refer briefly to the changes suggested in resolutions as they are brought before you, and I will read only those in which substitute motions or broad amendments have been suggested by your committee. Resolution No. 1, introduced by the Council of the C.M.A., referring to military service, is recommended for adoption as published and unchanged. Mr. Speaker, I move the adoption of this section of the report.

SPEAKER ALESEN: Any discussion? All those in favor signify by saying "aye." (General assent.) It is so ordered.

Resolution No. 2

DR. WARD: Resolution No. 2, introduced by the Council of the C.M.A., in reference to a committee to study and direct the care of chronic alcoholics has been completed by your reference committee by the addition of the amount of $2,000 being designated as the sum to be appropriated by the House of Delegates to defray travel and other expenses of this committee. The amount of this appropriation was arrived at by consultation with members of the Council and administration of C.M.A. as being sufficient to carry on this work. Your committee recommends the adoption of this resolution as completed. Mr. Speaker, I move the adoption of this section of the report.

SPEAKER ALESEN: Any discussion? All those in favor signify by saying "aye." (General assent.) It is so ordered.

Resolution No. 3

DR. WARD: Resolution No. 3, introduced by the C.M.A. Council, referring to the appointment of a Committee on Credentials and Four Reference Committees has been unchanged and your committee recommends adoption of this resolution. Mr. Speaker, I move the adoption of this section of the report.

DR. ALESEN: Moved and seconded. Is there any discussion? This is a By-Law change, and it requires a two-thirds vote. Those in favor signify by saying "aye." (General assent.) It has been passed by more than two-thirds majority.

Resolution No. 4

DR. WARD: Resolution No. 4, introduced by the Council of the C.M.A., referring to transfers of county medical society membership was approved by the Reference Committee unchanged and is recommended for adoption. Mr. Speaker, I move the adoption of this section of the report.

SPEAKER ALESEN: Another By-Law change. Is there any discussion? All those in favor signify by saying "aye." (General assent.) Was there one "no" vote? It is passed by more than two-thirds majority.

Resolution No. 5

DR. WARD: Resolution No. 5, introduced by the Council of the C.M.A., referring to membership where major office and residence are in different counties was unchanged by the Reference Committee, and is recommended for adoption. Mr. Speaker, I move the adoption of this section of the report.

SPEAKER ALESEN: This is a By-Law amendment. Is there any discussion? All in favor signify by saying "aye." (General assent.) It is adopted by more than two-thirds majority.

Resolution No. 6

DR. WARD: Resolution No. 6, introduced by Dr. William Donald of Alameda County, which refers to the consideration of ethical practice by hospitals approved by the Council on Medical Education and Hospitals of the A.M.A. was unchanged by your Reference Committee which recommends adoption of this resolution. Mr. Speaker, I move the adoption of this section of the report.

SPEAKER ALESEN: Is there a second? Any discussion? All in favor signify by saying "aye." (General assent.) It is so ordered.

Resolution No. 7

DR. WARD: Resolution No. 7, introduced by Frank Crandall of Los Angeles, calling for the formation of a Section on Allergy in the C.M.A. was unchanged by your reference committee and is recommended for adoption by the House. Mr. Speaker, I move the adoption of this section of the report.

SPEAKER ALESEN: Mr. Hassard, does that require a By-Law change?

DR. HASSARD: No, sir. The Constitution permits the House of Delegates to add the section.

SPEAKER ALESEN: Is there discussion? All those in favor signify by saying "aye." (General assent.) It is so ordered.

Resolution No. 8

DR. WARD: Resolution No. 8, introduced by A. B. Diepenbrock of San Francisco was considered by the Reference Committee and has been amplified by the addition of the following sentence: "The Council is further directed to consult with the Committee on Hospitals, Dispensaries and Clinics of the C.M.A.

for implementation of this program. Your committee favors the adoption of this resolution as amended. Mr. Speaker, I move the adoption of this section of the report.

SPEAKER ALESEN: Moved and seconded. All those in favor signify by saying "aye." (General assent.) It is so ordered.

Resolution No. 9 (and 25)

DR. WARD: The Reference Committee found two resolutions, No. 9 and No. 25, which dealt with the present policies of the Veterans Administration as to the admission of veterans to the facilities with non-service connected disabilities. Since Resolution No. 9, introduced by the San Francisco County Medical Society through A. B. Diepenbrock, and Resolution No. 25, introduced for the Sonoma County Medical Society by D. C. Oakleaf, were aimed at accomplishments of the same ends, they have been combined into the following substitute resolution:

"WHEREAS, Generals Bradley and Hawley have espoused the concept that the Federal law intended the use of veterans' facilities only for the care of the veteran with service connected disability or the indigent veterans with non-service connected disabilities, and

"WHEREAS, These two champions of veterans' rights were both keen to see that the veterans receive home town care of the quality obtainable through the private practice of medicine, and

"WHEREAS, The intent of the law is being circumvented by administrative interpretation which assumes that all veterans are indigent and therefore eligible for complete care in government hospitals by government employees, and

"WHEREAS, We are reliably informed that according to Veterans' Administration records, more than 80 per cent of the free hospitalization cases handled in 1946 had no connection with military service, and

"WHEREAS, The $7,600,000,000 cost of Veterans' Administration in 1946, constituting one-fifth of the total Federal budget and one billion dollars more than the Army itself cost, represents an enormous and growing burden to veteran and non-veteran taxpayers alike, and

"WHEREAS, Veterans' organizations have repeatedly gone on record as opposing nationalization of medical practice and compulsory health insurance, and

"WHEREAS, It is inconsistent for these same organizations to urge their members to seek free care from government employed physicians when they can afford medical services rendered by the private doctor of their choosing; now therefore, be it

"*Resolved:* That this House of Delegates register its condemnation of the extension of government medical care by bureaucratic interpretation and demands that the Veterans Administration restrict its activities to those specified in existing Federal law, and be it further resolved that this resolution be introduced in the House of Delegates of the A.M.A. by delegates of C.M.A.; and be it further

"RESOLVED: That each member of Congress be memorialized by this association to the end that they may understand that each extension of federally owned hospitals and personnel to render service that can be rendered by physicians in private practice is a step toward nationalization of medical practice."

The Reference Committee recommends the adoption of this substitute resolution. Mr. Speaker, I move the adoption of this section of the report.

SPEAKER ALESEN: Is there any discussion? All those in favor signify by saying "aye." (General assent.) It is so ordered.

Resolution No. 10

DR. WARD: Resolution No. 10, introduced for the San Francisco County Medical Society by A. B. Diepenbrock, which refers to the practice of medicine by corporations and unlicensed groups, is recommended for adoption unchanged. Mr. Speaker, I move the adoption of this section of the report.

SPEAKER ALESEN: Moved and seconded. Is there any discussion?

DR. CLINE: May we have that resolution read?

DR. WARD: It has been requested that the resolution be read.

"WHEREAS, The numerous resolutions passed by the delegates of the C.M.A. already cover the practice of medicine by corporations and unlicensed groups, and

"WHEREAS, The C.M.A. has already made a comprehensive and adequate study of the problem (Volume 43, Number 1, July, 1935; Volume 45, Number 1, Page 86, July, 1936; Volume 40, Number 6, Page 439; Volume 46, Number 6, Page 419, July, 1937); now therefore, be it

"*Resolved:* That these resolutions and reports be reactivated and that the House of Delegates of C.M.A. direct the appropriate committee to reconsider and act."

SPEAKER ALESEN: Any further questions? The committee recommends the adoption of this resolution. All those in favor signify by saying "aye." (General assent.) It is so ordered.

Resolution No. 11

DR. WARD: Resolution No. 11, introduced for the San Francisco County Medical Society by A. B. Diepenbrock, referring to present legislation that calls for comparison of compensation paid in public institutions with compensation paid in private hospitals for determining whether a private hospital is entitled to tax exemption. In order to accomplish the intent of this resolution, your committee rewrote and offers a substitute resolution as follows:

"WHEREAS, State administrative agencies are, through interpretation of tax exemption laws, attempting to regulate the level of compensation of physicians practicing medicine in private hospitals in California, and

"WHEREAS, These agencies compare compensation of physicians in private hospitals with compensation

received by physicians employed by public institutions, and in some instances, penalize the private hospital if physicians practicing in it earn more than physicians employed in state institutions, and

"WHEREAS, All surveys and studies of salaries paid in state institutions conclude that such salaries are inadequate and below a reasonable subsistence level; now, therefore, be it

"*Resolved:* That the Council of the California Medical Association is hereby instructed to take all steps within its power to obtain legislation eliminating any comparison of compensation paid for professional services of physicians in public institutions with like services of physicians in private hospitals in connection with determination of tax exempt or other status of any private hospital."

Your committee recommends the adoption of this substitute resolution. Mr. Speaker, I move the adoption of this section of the report.

SPEAKER ALESEN: Moved and seconded. Is there discussion? All those in favor signify by saying "aye." (General assent.) It is so ordered.

Resolution No. 12

DR. WARD: Resolution No. 12, introduced by A. B. Diepenbrock for the San Francisco County Medical Society, congratulating the Legislative Committee and its chairman, Dwight H. Murray, for their splendid services during the 1947 session of the Legislature, is recommended for adoption by your committee unchanged and with a fervent "amen." Mr. Speaker, I move the adoption of this section of the report.

SPEAKER ALESEN: Any discussion? All those in favor signify by saying "aye." (General assent.) It is so ordered.

Resolution No. 13

DR. WARD: Resolution No. 13, introduced by J. Severy Hibben of Los Angeles, referring to publication of the minutes of the House of Delegates. Your Reference Committee recommends this be not adopted, because the complete minutes, with the exception of executive sessions, are published in the journal of the C.M.A. and the resolution is therefore redundant. Mr. Speaker, I move the adoption of this section of the report.

SPEAKER ALESEN: Any discussion? All those in favor signify by saying "aye." (General assent.) It is so ordered.

Resolution No. 14

DR. WARD: Resolution No. 14, introduced by Frederick J. Gaspard of Los Angeles, in reference to selection of additional doctors under the Workmen's Compensation Act. Your committee recommends the adoption of this resolution unchanged. Mr. Speaker, I move the adoption of this section of the report.

SPEAKER ALESEN: Is there any discussion? All those in favor signify by saying "aye." (General assent.) It is so ordered.

Resolution No. 15

DR. WARD: Resolution No. 15, introduced by A. E. Anderson of Fresno, relating to life membership in the Association, was considered by your Reference Committee which reached the conclusion that the aims of this resolution had been partially accomplished by the constitutional amendment just approved by the House and that the segregation and allotment of funds to the Benevolence Fund is complicated and impractical of administration. Since the constitutional amendment referred to provides for reduction of dues by the Council for illness and other reasons, your committee recommends that this resolution be not adopted. Mr. Speaker, I move the adoption of this section of the report.

SPEAKER ALESEN: The House will notice that favorable action on the committee's recommendation disapproves the resolution. Is there a second? Any discussion? All those in favor signify by saying "aye." (General assent.) The committee's recommendation is adopted and the resolution is therefore lost.

Resolution No. 16

DR. WARD: Resolution No. 16, introduced by John Bullis of Los Angeles. I hereby call your attention to an error in your mimeographed copy which attributed this resolution to R. O. Bullis. This resolution refers to a definition of rebates. Your committee recommends the adoption of this resolution unchanged. Mr. Speaker, I move the adoption of this section of the report.

SPEAKER ALESEN: Is there discussion? All in favor signify by saying "aye." (General assent.) It is so ordered.

Resolution No. 17

DR. WARD: Resolution No. 17, introduced by Wilbur Bailey of Los Angeles, calls for the addition of a paragraph to Section 4, Chapter I of the By-Laws of the C.M.A. by addition of a paragraph prohibiting referral of patients to certain institutions. Your Reference Committee recommends approval of this resolution unchanged. Mr. Speaker, I move the adoption of this section of the report.

SPEAKER ALESEN: This is a By-Law change. Is there any discussion? All those in favor signify by saying "aye." (General assent.) It has been passed by more than two-thirds majority.

Resolution No. 18

DR. WARD: Resolution No. 18, introduced by Wilbur Bailey of Los Angeles, establishing the right of the accuser to carry charges to the Council of the C.M.A., was given detailed study by your Reference Committee. A great deal of discussion was carried on by those interested in this resolution. Because it was felt that the aims of this resolution could be as well accomplished by existing mechanisms such as the Standing Committee on Membership and Organization of the C.M.A., a substitute resolution introduced by Dr. Bailey at the Sunday meeting of the House of Delegates, but inadvertently not included

in your mimeographed copy, is placed before you by the committee. This resolution reads as follows:

"*Resolved:* That the Standing Committee on Membership and Organization of this Association is hereby directed to exercise its duties and powers under subdivision (c) of Section 2 of Chapter II of the By-Laws, and under Section 4 of Chapter I of the By-Laws, which require that all members of this Association be honorable and ethical in their conduct and subscribe to the principles of medical ethics of the American Medical Association; and be it further

"*Resolved:* That the Standing Committee on Membership and Organization is further directed to investigate any and all instances that it may discover of rebating practices or of practices under which members of this Association may in any manner receive a reward or benefit as the result of referring patients to others; and wherever said committee shall find any instances of rebating or practices that under other guises amount to rebating, that it forthwith prefer charges to the secretary of the accused member's county society and prosecute said charges as it is in duty bound to do under said subsection (a) of Section 2 of Chapter II of the By-Laws; and be it further

"*Resolved:* That the Council is hereby directed to give the Standing Committee on Membership and Organization all assistance, financial and otherwise, that said committee may reasonably require in order to carry out the instructions contained in this resolution."

Your Reference Committee recommends the adoption of this substitute resolution. Mr. Speaker, I move the adoption of this section of the report.

SPEAKER ALESEN: Any discussion?

DR. SHEPHARD: (Question asked by Dr. Shephard not audible to reporter.)

MR. HASSARD: Dr. Shephard, based on what sense?

DR. SHEPHARD: The question of getting the county society into difficulty for bringing action as preferred in this resolution. Most county societies have a specified form in which charges must be preferred, and we had an experience in this state not long ago where the thing went up to the Council of the A.M.A., and because certain counties and states had not followed their own rules and regulations regarding how charges should be preferred, when it got to the A.M.A. it was turned back.

MR. HASSARD: Dr. Shephard, this resolution does not change in any way the present By-Laws of the California Medical Association. All it does, as I understand it, is direct the Standing Committee on Membership and Organization to act under one of the existing sections of the By-Laws.

SPEAKER ALESEN: Was there a second? Is there further discussion? All those in favor signify by saying "aye." (General assent.) It is carried.

Resolution No. 19

DR. WARD: Resolution No. 19, introduced by Burt Davis of Santa Clara County, which refers to interpretation of medical ethics as applied to individuals and associations, was given minute consideration by your Reference Committee. By agreement with Dr. Davis, your committee drew up a substitute resolution which more clearly defines the issues than the original resolution. This substitute resolution reads as follows:

"WHEREAS, The Principles of Medical Ethics of the American Medical Association expressly provide that all of the ethical rules governing individual Doctors of Medicine apply with equal force and scope to physicians practicing in groups (no matter how organized or composed), and

"WHEREAS, The interpretation and enforcement of this principle presents many and varied problems, complex in nature, which ought to be clarified and restated in simple direct form so that the members of the Association may have a ready, intelligible guide to the ethical bounds and limits of group practice, applying thereto the same rules that govern individual practice; now, therefore, be it

"*Resolved:* That the Council is directed to prepare and submit to the next session of the House of Delegates for approval and adoption, a definite and comprehensive Code of Ethical Principles applicable to all types of group practice, such code to be based on the fundamental concept that there must be a single standard of ethics governing all physicians regardless of the organization form chosen for the conduct of their practices. Your committee recommends the adoption of this substitute resolution."

Mr. Speaker, I move the adoption of this section of the report.

SPEAKER ALESEN: Is there discussion? All those in favor signify by saying "aye." (General assent.) It is carried.

Resolution No. 20

DR. WARD: Resolution No. 20, introduced by Wesley Smith of San Diego, referring to assistance of the public relations counsel to outlying county societies, was amended by your committee in consultation with representatives of societies in the southern part of the state. The amended resolution is as follows:

"WHEREAS, The San Diego County Medical Society feels that it has received less assistance from the C.M.A. public relations counsel than its financial support would seem to warrant; therefore be it

"*Resolved:* That the San Diego County Medical Society and all other smaller county societies should receive assistance from the C.M.A. in the formation of public relations policies more in accord to the contributions of its members to the C.M.A. treasury. The Council of the C.M.A. is hereby directed to implement this resolution by arranging consultation between the public relations counsel and the involved county medical society officers not less than once annually. The Council is further directed to make available to these county societies additional consultation by its public relations counsel when specifically requested."

Your committee recommends the adoption of this amended resolution. Mr. Speaker, I move the adoption of this section of the report.

SPEAKER ALESEN: Any discussion? All those in favor signify by saying "aye." (General assent.) It is so ordered.

Resolution No. 21

DR. WARD: Resolution No. 21, introduced by Wesley Smith of San Diego, referring to the coroner's system of conducting postmortem examinations. Your committee clarified this resolution by the addition of two words so that the last paragraph of the resolution will read as follows:

"*Resolved:* That the Council of the C.M.A. be directed to foster legislation to correct these inadequacies to the governing bodies of the State of California."

Your committee recommends the adoption of this amended resolution. Mr. Speaker, I move the adoption of this section of this report.

SPEAKER ALESEN: Is there any discussion?

DR. CLINE: Heretofore, the same recommendation has been made, and it was found by your Legislative Committee inadvisable at the particular time to go ahead with the idea. I think we are all in agreement with the intent of this resolution, but I think that it is embarrassing to have the Council directed, or your Legislative Committee directed, to secure the process of legislation when circumstances of a given time might make the pressing of that legislation highly inadvisable. I would like to ask if it is the opinion of the committee that this is a mandate that such legislation be prepared and pressed regardless, and if so, I ask you to vote, or rather—

DR. WARD: Well, we didn't want to put any burrs under the tail of the Council, so we didn't make this a mandate, and we didn't set any time. As it reads, "That the Council of the C.M.A. be directed to foster legislation to correct these inadequacies to the governing bodies of the State of California," there is no limitation on when the Council should do this.

SPEAKER ALESEN: Is there any further discussion?

DR. MURRAY: Mr. Speaker, Dr. Ward, Members of the House of Delegates. Such a resolution was introduced, I think, two or three years ago. I don't remember what year now, but the resolution was to the effect that the Legislative Committee should try to get this coroner's system, which we agree is somewhat antiquated, changed. But due to the press of other legislative matters, particularly compulsory health insurance, we felt it highly inadvisable to undertake any controversial legislation, as that would be. You understand that that will meet opposition from the governing bodies of the counties, such as the Board of Trustees in some instances, the Sheriffs in other instances, the Coroners, and so forth. I should like to have the addition of a word or phrase—"At the discretion of the Council and the Legislative Committee," or, if you wish, "At the discretion of the Legislative Committee with the advice and consultation of the Council."

SPEAKER ALESEN: Do you move that in a form of an amendment, Dr. Murray?

DR. MURRAY: Yes, I do.

SPEAKER ALESEN: Will you clarify that. What is your proposal?

DR. MURRAY: I have to think about that—the wording.

DR. WARD: I'll accept Dr. Murray's suggestion for an amendment to our substitute resolution which then reads as follows:

"*Resolved:* That the Council of the C.M.A. be directed to foster, *at its discretion*, legislation to correct these inadequacies."

SPEAKER ALESEN: Is that amendment—the amended form of the resolution—clear to the House? Now, is there further discussion? Ready for the question? All those in favor signify by saying "aye." (General assent.) It is so ordered. That's the acceptance of the report as amended.

Resolution No. 22

DR. WARD: Resolution No. 22, introduced by Wesley Smith of San Diego, referring to a branch office of the C.M.A. in Southern California, was approved by the Reference Committee and recommended for adoption. Mr. Speaker, I move the adoption of this section of the report.

SPEAKER ALESEN: Is there discussion? All those in favor signify by saying "aye." (General assent.) It is so ordered.

Resolution No. 23

DR. WARD: Resolution No. 23, introduced by Wesley Smith of San Diego, referring to care of crippled children, was amended so that the last paragraph will read:

"*Resolved*: That the House of Delegates through the Council of the C.M.A., investigate the basic authority of the administrative agency concerned and the apportionment and expenditure of funds under the Crippled Children's Act in order to bring under the provisions of the act only those unable to afford private medical care."

Your committee recommends the adoption of this amended resolution. Mr. Speaker, I move the adoption of this section of the report.

SPEAKER ALESEN: Is there discussion? All those in favor signify by saying "aye." (General assent.) It is so ordered.

Resolution No. 24

DR. WARD: Resolution No. 24, introduced by Wesley Smith of San Diego, referring to the activities of Mental Hygiene Clinics, was amended so that it reads as follows:

"WHEREAS, The Mental Hygiene Clinics recently established throughout the State seriously encroach upon the private practice of medicine; therefore be it

"*Resolved:* That the House of Delegates direct the Council of the C.M.A. to foster legislation to restrict the practice of the State Mental Hygiene Clinic to patients unable to pay for private medical care."

Your committee recommends the adoption of the amended resolution. Mr. Speaker, I move the adoption of this section of the report.

SPEAKER ALESEN: Is there discussion? All those in favor signify by saying "aye." (General assent.) It is so ordered.

Resolution No. 26

DR. WARD: Resolution No. 26, introduced by Orrin S. Cook of Sacramento, in reference to acceptance by hospitals of the unit value for laboratory services rendered under C.P.S. Because your committee felt that a resolution emanating from the C.M.A. would be more effective than one originating in the offices of C.P.S., this resolution was amended in the next to last paragraph by the substitution of "Council of the C.M.A." in place of "C.P.S." Otherwise, the resolution was unchanged. Your committee recommends the adoption of this amended resolution. Mr. Speaker, I move the adoption of this section of the report.

SPEAKER ALESEN: Is there any discussion? All those in favor signify by saying "aye." (General assent.) It is so ordered.

Resolution No. 27

DR. WARD: Resolution No. 27, introduced by Neill Johnson of San Joaquin County, referring to participation in the World Health Organization. After considerable discussion on this resolution, your committee reached the conclusion that any action with regard to participation in this program should be taken by the A.M.A. rather than individual states. The committee therefore recommends this resolution be not adopted. Mr. Speaker, I move the adoption of this section of the report.

SPEAKER ALESEN: The approval of committee's recommendation defeats the resolution. Is there any discussion? All those in favor signify by saying "aye." (General assent.) The report is approved; the resolution is rejected.

Resolution No. 28

DR. WARD: Resolution No. 28, introduced by Frank Reardon of Sacramento, in reference to fees for preparation of reports requested by insurance companies. Despite the fact that your committee agreed that insurance companies often impose upon physicians and that the physicians should be more adequately compensated for their reports, your committee did not feel that it was the function or within the province of the C.M.A. to set fees for such services. Your committee respectfully suggests that an answer to this problem might be secured if doctors would use the short insurance forms approved by the San Francisco and other county medical societies and agreed upon by a conference with insurance adjusters. On these forms is a notation that a charge will be made to the insurance companies for additional information. For these reasons, your committee recommends that this resolution be not adopted. Mr. Speaker, I move the adoption of this section of the report.

SPEAKER ALESEN: Is there discussion?

DR. BENDER: There is a distinction between those two forms. This is in reference to the blanks that are sent by insurance companies to physicians to complete in order to give information about individuals who have been patients of doctors at any time in the past, maybe six months ago—maybe ten years. Insurance companies allot anywhere from nothing to $2.00 for that service—completing a blank which is of use to them, of very much value to them in many instances in deciding on insurability of an applicant for insurance. Those blanks are not comparable to the form that we have in the San Francisco County Medical Society in which information is filled in about people that you are taking care of who are making claims on an insurance company for a current accident or illness. An insurance company that is trying to decide on the insurability of an applicant wants to get information about an individual from the doctor. It seemed to us, after due deliberation, that this information is worth more to an insurance company than the one or two dollars, and frequently nothing, which they allot for such information, and it certainly takes much more of the doctor's and his secretary's time than is justified by the one or two dollars that is allotted. That's why the California Society of Internal Medicine may go on record—and has already prepared blanks for its members to send to insurance companies who request that information—as stating that the fee for such service among the internists is $5.00. We simply want to recommend that to the California Medical Association for two reasons. One, we would like—if the C.M.A. agrees—we would like to have others enjoy the benefits; and if it does agree, it would make our position as members of the California Society of Internal Medicine that much stronger.

DR. SHEPHARD: Mr. Speaker, I'm highly in favor of this report. In 1906 when I started practicing medicine I received $5.00 for making an insurance examination for an old line company. Today the doctor doing that type of work still receives $5.00 for the same service. Now, there are several county societies in this state that have their Executive Secretaries, and I think it might be very apropos, and very proper, and very effective if the Executive Secretaries of the county societies might get together and draft a letter, and, if necessary, a demand upon insurance companies, telling them that, for various reasons, from now on the fees for examinations for insurance policies will be elevated. I think in that one rule alone, our Executive Secretaries of the county societies can pay their entire cost to the society.

DR. BRUCK: I'm very heartily in favor of Dr. Bender's and Dr. Reardon's suggestion, but inasmuch as it is not within the province of C.M.A. to fix a fee, I would like to propose an amendment that would read as follows:

"*Resolved:* That the California Medical Association go on record as urging a reasonable fee to physicians for furnishing this service," rather than stating $5.00. That is a suggested amendment.

SPEAKER ALESEN: You offer as an amendment to Dr. Reardon's original resolution, the wording, "The California Medical Association go on record as urging a reasonable fee for examinations." The amendment has been seconded. This puts us into a little parliamentary difficulty here. There is a motion before the House on the adoption of committee's report which urges the rejection of the original resolution. The Chair will rule that there is before you at this time, instead of the committee's report, the original resolution as proposed by Dr. Reardon, and now the amendment to that resolution. We will vote on the amendment. All those in favor signify by saying "aye." (General assent.) There is now before you the amended resolution by Dr. Reardon with the provision that the California Medical Association go on record as urging a reasonable fee for such services. Is there any discussion on that resolution as amended? All those in favor signify by saying "aye." (General assent.) The original resolution as amended is adopted. Proceed, Dr. Ward.

Resolution No. 29

DR. WARD: Resolution No. 29, introduced by H. B. Breitman of Los Angeles, in reference to a survey committee appointed to consider and review the organization and administration of the C.M.A. Your Reference Committee was in unanimous agreement that such a review committee was unnecessary, expensive, and its creation contra-indicated because such a committee would be a duplication of the efforts of the present Constitution and By-Laws Committee under the chairmanship of Doctor McClendon. Your committee further wishes to express its confidence and approval of the manner in which the present Council and Officers of the C.M.A. have conducted their assigned duties. For the above reasons, your committee recommends that this resolution be not adopted. Mr. Speaker, I move the adoption of this section of this report.

SPEAKER ALESEN: Is there discussion? All those in favor signify by saying "aye." (General assent.) The committee's report is adopted; the resolution is rejected.

Resolution No. 30

DR. WARD: Resolution No. 30, introduced by L. L. Craven of Los Angeles, in reference to 1949 dues of the Association. After consultation with the introducer of this resolution, and with his agreement, your Reference Committee offers a substitute resolution as follows:

"WHEREAS, The annual dues of the C.M.A. have been high enough to cause financial hardship to some of its younger members; now, therefore, be it

"*Resolved:* That the 1949 dues be placed at the lowest level consistent with the 1949 budget."

Your committee recommends the adoption of this substitute resolution. Mr. Speaker, I recommend the adoption of this section of the report.

SPEAKER ALESEN: All those in favor signify by saying "aye." (General assent.) So ordered.

Resolution No. 31

DR. WARD: Resolution No. 31, introduced by George Caldwell of Los Angeles, relating to public relations counsel. In view of the report of public relations counsel to the meeting of this House last Sunday, your Reference Committee decided that the purposes of this resolution were not only inadvisable but impossible to accomplish. Following discussion of this resolution, it was felt that the Council of the C.M.A. should be complimented and encouraged in the continuation of its activities with regard to the present public relations program. For the above reasons your Reference Committee recommends that this resolution be not adopted. Mr. Speaker, I move the adoption of this section of the report.

SPEAKER ALESEN: Is there discussion?

PRESIDENT CLINE: Mr. Speaker, members of the House of Delegates. As your President this last year, when criticism of the public relations program was offered by various members, I took it upon myself to write to certain individuals in the state in the name of the Association seeking information concerning the effectiveness of the program that had been carried out. The members chosen were four members of the State Legislature, namely, the Lieutenant Governor, the Speaker of the Assembly, Senator Fred Kraft who had been chairman, while he was in the Assembly, of the committee which heard and tabled Governor Warren's original bill, and Mr. Ernest Geddes of the Assembly because he was the chairman of the Interim Committee which studied health insurance. In that letter, I asked certain specific questions. I shan't bother to read that letter, but I think it is worthwhile for you to hear the reply. The first question was, "Do you consider that the existence of California Physicians' Service has been a valuable factor in our fight against the enactment of a compulsory health insurance law? If so, how effective do you believe it has been? (2) Do you consider that a continued growth of California Physicians' Service would be of value in combating similar efforts in the future? (3) Do you consider that the Blue Cross plans, insurance coverage and all other forms of voluntary medical care coverage are of value in this fight? If so, do you believe they will have continuing value? (4) Do you believe this Association should continue this campaign of public education—that a continuation would be of value to the public, to the Legislature, to this Association? (5) Finally, do you believe that the campaign this Association has carried on for the past two years has had any measurable effect on the status of this Association in the opinion of the Legislature and in the opinion of your own constituents?"

If I may ask the House to grant the time to read the replies, I think they will be illuminating to you. The letter from Mr. Kraft, in which he answers the questions serially:

"(1) Yes. In my opinion the California Physicians' Service has been most effective in the fight against health insurance. At one time it was the only weapon which I had available to me in my struggle with the proponents of health insurance. (2) I definitely be-

lieve that its continued growth would be of value in combating similar efforts. I would like to answer this question and No. 3 in some detail at this point. I am now selling both life insurance and accident and health insurance. I have found in my many contacts that the general public is becoming acutely aware of the value of the latter type of insurance. They appreciate the feeling of both independence and security which it gives them. They want to provide for future emergencies, but they want to choose their own doctors and their own hospitals. They want to make those arrangements which best fit their circumstances and their needs; they do not want these dictated to them. They are aware that such policies offer a greater degree of protection than heretofore, and that despite these more liberal attractions, the cost has been greatly reduced. The growth of this realization on the part of the public is and will be, I am convinced, of incalculable value to us in defeating any future efforts to enact health insurance legislation. (3) I believe that any answer to the previous question indicates that the answer is 'yes' to both of these. (4) Yes. Very definitely this should be continued. (5) Yes. In my travels and after my talks throughout Southern California, I have continually sounded out the public's views on this. I am sure that the public is gradually becoming aware of the fact that the medical profession is trying to eliminate the high costs of medical care. As we know this has been the chief weapon of the proponents of health insurance. There is still, however, much that can be done. Some readjustment must be made by individual doctors in their method of calculating charges. Medical charges should be placed on a business basis. It is time, I believe, that the old axiom 'soak the rich and please the poor' was relinquished in favor of a more equitable method of fixing costs.

"Further, I have had numerous complaints about the extreme degree of specialization in the medical profession. Occupying as I do a midpoint between the profession and the public, I appreciate fully just what forces and conditions created the modern specialist, and further I realize that the demand on the part of the public for more and more technical knowledge and training on the part of their doctors has been responsible for this condition. In many instances, however, it has gone too far. There is an increasing demand today for more general practitioners, a demand of which, I am sure, the medical profession is acutely aware. My constituents' chief complaint is about the practice of referring a patient from one specialist to another and the consequent high charges. There has been a lessening of the close personal bonds between the patient and the old general practitioner which has disappeared in the wake of extreme specialization, and which has not worked in favor of the medical profession.

"Finally, the matter of rebates goes further than the ophthalmologists. I earnestly hope the profession will handle this in its own way, thus circumventing any 'expose'.

"My sincere thanks for giving me this opportunity to express my opinions.

"Sincerely, Fred H. Kraft."

I shan't bother to read the other letters to you. They are in much the same vein as to the efficacy of the program which the California Medical Association has carried out. Letters came from Sam L. Collins, Goodwin Knight, and Ernest R. Geddes.

Then I asked Mr. Ben Read to tell me the members of the Third House who had been most helpful to the medical profession in defeating compulsory health insurance in Sacramento. I think they were members who had an intimate knowledge of the public relations, and an intimate knowledge of legislative processes and also had demonstrated by their activities in Sacramento that they were sympathetic to your case. He gave me a list of about seven or eight names. I wrote to these men. Replies came from James Mussatti of the State Chamber of Commerce, Mr. C. R. Stevens, who represents the oil people, from the National Board of Fire Underwriters as represented by Frank J. Agnew, and from Mr. Walter J. Little, attorney in Los Angeles, who represents the railroads. I would like to read you a portion of Mr. Little's letter. It is not as long as the one I just read. I want to say this before I start: The letter addressed to these representatives of business in Sacramento was not the same letter which had been addressed to the others. When I received Mr. Kraft's reply, I realized the difficulty of following the numbers. There was different phrasing in the second letter and I specified certain accusations which had been made against the program of the C.M.A. You will recognize, therefore, certain terminology in some of these replies. Now, Mr. Little's letter: "From the frankness of your letter of March 8 regarding the question of your legislative and public relations programs, I deem it you wish a frank reply. To begin with, on the positive side, I am amazed at the recitation of your progress in increasing the number of persons now enrolled in voluntary health insurance systems in California. Since I have seen very little promotional efforts, other than those of the California Physicians' Service, it is only reasonable that this marvelous record can be credited solely to the medical profession. It is reasonable also to assume that every member of a voluntary program is an opponent of compulsion since, should there be compulsory state insurance, he would be forced to pay double or drop his protection with his family doctor.

"On the negative side—and I say this with the deepest feelings of regret, since I realize that it is a situation generated by the avarice of but a small percentage of your physicians—your medical togas are already muddied. I refer to the unfortunate rebating expose which was given particularly sensational treatment by the newspapers of Los Angeles County—Los Angeles County which sends thirty-two of the total of eighty men to the Assembly of the California Legislature. This one instance has been a most serious setback to all men of the profession. It muddied the togas of all. To regain your former prestige will require the most expert public relations, since the rebate episode has placed a serious handicap on your present and future legislative activities. I repeat: it

was unfortunate. However, much as we would like, we cannot erase history.

"To end on a positive note: Except for the incident noted above, those of us who are close to the California legislative picture have admired your constructive battle against the forces which have been working for State Medicine. You have done more than point out the dangers of State-administered Medicine—you have shown how the problem can be solved in the voluntary and democratic way. For this your entire profession is to be commended. However, under present circumstances, it would be the utmost of folly to consider even the slightest relaxation of your efforts."

This other letter, which is somewhat longer, but I think is worthwhile reading to you, is from Mr. Taylor, who is the Executive-Secretary of the Agricultural Council of California. This is an organization composed of some thirty-odd other organizations. It represents more than seven thousand farmers and is the largest farm organization in the state, being larger than the Grange or the Farm Bureau.

"Yours of March 8 has just come and I hasten to reply. I am familiar with much of the work that has been done to head off the establishment by legislation of state-controlled system of compulsory health insurance. My people and I are very much opposed to such a plan, and we have watched with interest the things that the C.M.A. and the C.P.S. have done to try to prevent the enactment of such legislation. I would not be frank with you, however, if I did not say to you that the danger of such enactment is far from past. The sooner any class of people get it out of their heads that they should not "muddy their togas in the political arena," the better off they will all be. Just this morning I came across an editorial in one of the newspapers of the state which pointed out that legislation is no longer a matter to be influenced by a few, but that if a government of free men is to be maintained, it will be maintained only as the millions participate in keeping it so. It went on to say that this can be done only by participation in the problems of government by every individual doing his part to acquaint legislators and the public at large with the problems with which he himself is acquainted.

"The sooner doctors quit thinking about their togas and begin to realize that they are an integral part of the community of people comprising this commonwealth, the better off they will be. Let me say here that this is not in any way an arraignment of you, personally, for I am sure you understand the problem about which I am talking, but too many people—whether they be doctors, lawyers (though the lawyers are less given to this), businessmen, workers, or farmers—seem to think that an honest man has no business mixing in politics or getting into the political arena. Nothing will destroy our free government more quickly than the expansion of that idea among our people.

"But, to get down to business, Doctor, I can assure you that there is plenty of danger still of compulsory health insurance. As a matter of fact, in medicine as in other branches of business a few selfish men can undo the hard work of a lot of honest, public-spirited men by the abuse of their powers within the industry in which they operate; and regardless of the fact that we ought always to oppose a compulsory health insurance plan operated by the State, there are many people who still think they are abused by the doctors—and some of them are. Again I want to make it clear that this is not an arraignment of the doctors as a whole; they are not more to be condemned than any other group, but they do hurt the cause, just the same. And I know, too, that with medical care costing as much as it does, people are very quick to pick up arguments which make them feel they can get their medical care for less."

He goes on in the same vein for another page. I want to read you just this one more. I think this is information all of you ought to have on this particular resolution before you. This comes from the California Retailers Association and is written by Vincent D. Kennedy:

"It is very difficult for me in these busy days, and under the pressures on even now here at Sacramento, to take the necessary time to reply to your letter of March 8 and give to my reply the full emphasis I feel it deserves. In the second paragraph of your letter you refer to the fact that I, among others, represented some help to your profession in connection with legislation on state-controlled system of compulsory health insurance. Goodness knows this is true, only it didn't start in 1945—it dates back many years before that time. For anyone to feel that there is little danger of a compulsory health insurance plan being enacted in the Legislature of the state at this time is ridiculous. It has been very gratifying to many of us—and from my observation from the standpoint of the people at large—to note that the medical men have departed from their smug attitude and have taken their place among the citizenry of this state as not only interested, but ready to fight politically for their rights and the rights of their patients. It is with a great deal of pride that we outside of your honored profession point to the fact that you have, and are putting forth, a highly constructive program directed in the main toward the education of the people to the evils involved in state or national socialization of medicine. A let-down at this time on the part of the medical profession would be fatal. As a matter of fact, it makes me so tired to even hear of such a thing that I can only say that if you fine leaders in the program, which I realize is a thankless job, feel that, by reason of lack of interest of the profession at large, you should retire, the welfare of this state will suffer greatly.

"Mind you, up to this point I have not referred to any selfish thinking on the part of individual medical men, but if there is any individual, or group of individuals, within the profession who are so shortsighted as not to see the ultimate result of a leveling off or letdown at this time, it is just too bad for them and they should perhaps suffer the consequence of such shortsightedness.

"As I stated at the outset, I am sorry I do not have the opportunity to 'make a speech' on this particular subject with an audience comprised of the fine, far-seeing group within the profession as well as those individuals who think that by hiding behind the cloak of a degree from a medical school, everything is going to be taken care of automatically as far as their interests, livelihood and position in society are concerned."

SPEAKER ALESEN: Is there further discussion? Do you wish to vote? All those in favor signify by saying "aye." (General assent.) It is so ordered. The resolution is rejected.

Resolution No. 32

DR. WARD: Resolution No. 32, introduced by Dave Dozier of Sacramento, referring to availability of data opposing socialized medicine to school children, libraries, etc. in California. After discussion and with the approval of the introducer, your committee recommends a substitute resolution as follows:

"WHEREAS, Classroom debates are being held in the schools throughout the State on the relative merits of socialized, state or federal medicine, and

"WHEREAS, Data against these purposes are at present not well organized or readily available in schools or public libraries; now, therefore, be it

"*Resolved:* That the Council of the C.M.A. make available to these schools and libraries the excellent literature now published by the Council on Medical Service of the A.M.A. and direct its public relations counsel to make these publications available to and encourage their use by the school children and libraries."

Your committee recommends the adoption of this substitute resolution. Mr. Speaker, I move the adoption of this section of the report.

SPEAKER ALESEN: Is there any discussion? All those in favor signify by saying "aye." (General assent.) It is so ordered.

DR. WARD: Mr. Speaker, I move the adoption of the report of Reference Committee No. 3 as a whole—as amended.

SPEAKER ALESEN: Is there a second? Is there discussion? All those in favor of the adoption of the Committee's report as amended signify by saying "aye." (General assent.) It is so ordered.

DR. WARD: This report is signed by Carl Rusche, L. E. Jacobs, and Robertson Ward.

SPEAKER ALESEN: And now the adoption of the budget for 1948-1949, and the setting of the Association dues. Dr. Bruck is chairman of the Council—Dr. Bruck.

DR. BRUCK: Gentlemen, you all have a copy of the proposed budget as to both income and to projected expenditures. I advise you all to sit down before you read it, so you won't fall down. I would like to go through this more or less item by item—rapidly, I promise you—and I'm going to take the expenditures first. As we come to each item, I will give the decrease or increase, and the reason therefore so that there will be a complete and total understanding of the budget, and I promise to take not more than eight or nine minutes. Under Item 7, that refers to expenditures proposed for projected rent, $7,000. That is a fixed fee which is the same as it has been in the past. Number 8, telephone and telegraph, an increase of about $1,000 due to increased usage and to increased rates. Postage, about $1,000, about the same. Office supplies and office expenses, $3,000, about the same. Secretary-Treasurer gets no salary. The Executive Secretary is increased from $14,000 to $16,000 this year—$2,000 on the basis of the contract for prolonged periods signed by the Council with the Secretary one year ago, bearing an increase in the Executive Secretary's salary. Clerical help from $16,000 to $20,000 due to wage increases, an increase of $4,000. Social security, unemployment taxes, about the same. Travel expenses, Officers, about the same; Council, the same; Executive Committee, the same; the Executive Secretary, increased $500. A.M.A. meeting expenses: Now, in previous years, this has been in the neighborhood of $4,000 or $5,000. This year it is projected for not one meeting of the A.M.A. as it has in the past, but two meetings. There are two meetings of the House of Delegates of the American Medical Association each year instead of one, and that necessitates all of our delegates going, travelling expenses, etc., so that amount is increased a little over last year—last year it was also expenses for two meetings of the A.M.A. Council-Executive Committee expenses, $1,500, the same. Annual Session, $12,000 last year, $14,000 projected for the coming year, an increase of $2,000. Employees' Annuities, reduced from $200 to $54 (and I may add there is a plan for an insurance scheme for annuities for employees). The item for the Department of Public Relations is for the legislative year just past, 1947, and the work done during that year on continuing projects, $190,000; for the coming year, $146,000, which is a reduction of $44,000. New Mexico Physicians' Service: In the year 1947-48 we loaned money to that organization at the rate of $750 a month. The last of that money is gone. There will be no further loan to the New Mexico Physicians' Service after the last day of this month. The Cancer Commission, the usual appropriation of $5,000. Medical Defense, $10,000 set up last year, and nothing for this year because the Committee on Medical Defense will not need money. Committees' Expenses, committees for the Constitution and By-Laws of the Constitution, Fee Schedule Committee—you have to do some traveling—are set at the same level as last year. The Council projected $10,000 for postgraduate activities. As you know, we now have a full scale postgraduate activity scheme going. This is an increase of $7,500. Just a little while ago, the House of Delegates voted to make that $18,000, and so that amount is increased by $15,500 over last year. Public Policy and Legislation, $50,000, the same for the coming year. Last year the United Public Health League, which is the group in Washington, and which is supported at the pro-rata per member, is $15,000. Benevolence Committee, $1.00 per member, $9,000, up $500 because there are 500 more members this year than last. Sec-

retarial Conference, $1,500 last year, and $1,500 this year. The item, donations to libraries, at 50 cents a head is up from $4,250 to $4,500 because there are 500 more members. The Legal Department previously has had a retainer of $6,000, and has had an expense account of approximately $1,500. In legislative years, the legal department usually does an extremely long and arduous job for which they present us with an additional bill. It has been fixed now by the Council on investigation that the amount to legal department would be increased by $4,500. Women's Auxiliary, $750, the same. Equipment Expense, the same. Miscellaneous and Contingency Fee at $1,000 rather than $3,000. The cost of the administration, printing, and distribution of the official journal of the C.M.A.: printing last year was put at $45,000, and the rate is already increased; it will cost us approximately $75,000 to print the journal for the next year. This is an increase of $30,000. Postage and mailing increased $500 due to increase in the number of journals and the number of advertising and sales expenses. Discounts and Collections, an increase of $600 to $1,000. Salaries, $5,400, with an increase to $10,000 due to more needed increases in salaries, up $4,600. Supplies and office postage, the same. Illustrations: Dr. Wilbur asked that an additional amount be allowed for this to improve the character of the journal. This is reflected in the budget in an increase of $1,000. Addressograph Expense, increased to $1,000, and Editorial Board Travel, $300, the same. The grand total of expenses, $450,154. With the addition of $8,000 just voted by the House of Delegates to add to the postgraduate program, $458,154.

The income, to allow for contingencies, is fixed about as follows: You can judge, with 9,000 members, that the dues needed to get $450,000 would be approximately $50 each. Advertising sales, $75,000, which about pays for the printing of the journal. Journal Subscriptions, $1,000. Reprint Sales, projected, $500. The Annual Session, $10,000—that is income from advertising and exhibitors. Miscellaneous, including earned income, interest, etc., $1,000, down to $750 this year. This, gentlemen, gives you a projected total income of about $537,000 with a projected expenditure of $458,000. In order to carry on with any degree of safety, without going into our reserves, it would mean that each of the 9,000 members would have to pay $50 dues for the year. That is the explanation of the amount of dues fixed by the Council.

SPEAKER ALESEN: Motion on the adoption of the budget and setting of dues as indicated in the budget.

DR. BRUCK: I move the adoption of the budget as printed.

SPEAKER ALESEN: Moved and seconded that the budget be adopted as printed. That also contains a setting of annual dues for members at $50 because that provision is made in the budget. Is there any discussion? Are you ready for the question?

DR. MOORE: Mr. Speaker, I think we have passed a resolution this evening to set up a branch office in Los Angeles. I see no provision in the budget to take care of that.

DR. BRUCK: Mr. Speaker, I can't answer that. The Council has had under advisement for some time, pending further study, and so reported in the additional Council report on Sunday night, a proposal for a branch office in Southern California. Just what this would cost I do not know. As you see, there is some excess in the proposed possible income over the proposed expenditure, and I'd like to ask Mr. Hunton what such an office set-up would entail in the way of money.

MR. HUNTON: Mr. Speaker, Members of the House, this subject has been under discussion, but no concrete plans have yet been made for the opening of this office or the manner in which it is to be maintained. In my opinion, an office in Los Angeles could well serve the needs of my office, of Mr. Hassard's office, and of the Advertising Department of the JOURNAL. I believe such an office could be maintained at an annual expense of not more than $3,000—on a conservative basis, probably with part-time help, or with secretarial service provided in one of the buildings downtown. That's about as close an estimate as I would be able to make at this time.

DR. BRUCK: Also, I believe that with an office down there, certain items—travel expenses and certain other things—might be saved. Probably we would save a good deal on telephone calls, etc., and it seems to me that that is the amount that it might be figured out on; it could be maintained on a basis of that much, and if it necessitates more at a later date, I think we have a contingency fund, and we're certainly not broke.

SPEAKER ALESEN: Is there further discussion on the adoption of the budget, and the setting of the dues for 1949 at $50? Is there income from the reserve fund? Can you tell us what that is?

DR. BRUCK: At the present time there is in United States 2½ per cent government bonds, $865,000. At 2½ per cent, that would be $20,000 a year.

MR. HUNTON: I might answer to the effect that the reserve funds of the Association are held by the Trustees of the California Medical Association, a corporation, which serves as a holding company, and the income for the Trustees of the C.M.A. is not represented in any way in this budget.

DR. ALESEN: Is there further discussion? All those in favor signify by saying "aye." (General assent.)

DR. BRUCK: Mr. Speaker, I will call your attention to the fact that, in the additional Council report on Sunday night, the formula was set up for the matter of life membership. I'll read to you again, if I may, that section of the report because, with the fixing of the dues, it has more meaning: "At the same time, the Council fully recognizes the undesirability of the present life membership fee contained in the Constitution, and urges the House of Delegates to consider it carefully before adopting it. If the amendment is adopted, the House of Delegates is urged to exercise its power under the new amendment to set the life membership fee. In this connection the Council recommends that if the pending Constitutional amendment be adopted, the House of Delegates at

a second meeting of this section, to be held Tuesday, April 13, fix the life membership fee during the ensuing year at ten times the 1948 annual dues for those applicants over 50 and under 60 years of age; seven times the 1948 annual dues for those applicants 60 and under 65 years of age, and three and one-half times the 1948 annual dues for those applicants 65 and under 70 years of age. It is further recommended that life membership fees be applicable to all applicants voted on by the Council at any time from the adjournment of the House of Delegates at this session to the adjournment of the House of Delegates at the 1949 session, and that in the 1949 session memberships be again considered for the following year." Mr. Speaker, I want to place this paragraph in the form of a motion for action by the House of Delegates.

SPEAKER ALESEN: Is there a second? Is there discussion? Is this clear to the House, that the purport or content of this resolution is to ask you to set the life membership fees on a scale of ten times the annual dues for those over 50 and under 60, seven times the annual dues for those 60 to 64, and three and one-half times the annual dues for those from 65 to 70. Is there discussion? All those in favor signify by saying "aye." (General assent.) So ordered. Is there any unfinished business, Mr. Secretary?

SECRETARY GARLAND: We have no unfinished business.

SPEAKER ALESEN: Is there any new business, Mr. Secretary?

SECRETARY GARLAND: We have no new business.

SPEAKER ALESEN: Does any member of this House have any new business to present at this time? If not we will proceed to the presentations of officers. Dr. Askey.

DR. ASKEY: Mr. Speaker, members of the House of Delegates. Acceptance of such an honor as you have just given me is a privilege, and I recognize it as such, but my privilege also imposes a responsibility. In the year ahead of me my endeavor will be to fulfill that obligation, remembering that to no one group, to no one friend, to no one district, to no one principle am I bound. I am bound to promote the welfare of the people in our profession. If we may judge the future by the past, many problems will arise during my term of office. I'm not so conceited as to believe that I alone can solve them. I will need your wisdom, your guidance, and your support. I do believe, though, that we can succeed. Discouragement at times will sap our strength; injustice will appear occasionally to prevail; fear will smite our reason, and personal animosities, if allowed to smolder, may threaten at times to consume our all. May we then, together, accept our duties with the obligations they impose. May we receive them with the dignity that they bear, and may we perform them as becomes those gifted with patrician soul. Perhaps what I have said is unnecessary. After I decided to phrase these thoughts, I remembered the words of Isaiah of old, who sends to the California Medical Association tonight a message. He said, "Strengthen ye. The weak hands confirm the feeble needs. Say to them that are of a feeble heart, 'Be strong, fear not, then the eyes of the blind shall be opened, and the ears of the deaf shall be unstopped, then shall the lame man leap as a hart, and the tongue of the dumb shall sing, and a highway shall be there, and sorrow and sighing shall flee away'."

SPEAKER ALESEN: Now, ladies and gentlemen of the House of Delegates, it is a pleasure to present your new President-Elect, R. Stanley Kneeshaw, of San Jose. Dr. Kneeshaw.

DR. KNEESHAW: Ladies and gentlemen, it is indeed a great pleasure to have been honored so tonight. I know that even after I spend my one year in the apprenticeship of this orator—who you can see has had a very good training—I will have lots of problems that I will not be able to solve. But I want you to know that I will do my best to promote progress in this organization so that we who are all medical men and women will be able to accomplish much more efficiently the things we should accomplish. Thank you.

SPEAKER ALESEN: Now may I next present your Vice-Speaker—Dr. Charnock?

DR. CHARNOCK: Thank you very much. May I present the Speaker?

SPEAKER ALESEN: Dr. Sam McClendon, as past president of the California Medical Association, has a very timely and historic duty to perform. Dr. McClendon.

DR. MCCLENDON: Mr. Speaker, Members of the House of Delegates, and you officers of the Association. It is always a pleasant privilege and an honor to perform the task imposed and that I am going to perform tonight. I can say with you, and I'm quite sure I'm certain for myself without question, that you have had an able leader this year. It has been an extreme privilege for me, and I know for you, to serve under his leadership, and have the benefit of his initiative and thinking. I'm sure there are many regrets that he is now passing on into the mere oblivion of Past President, but there are still some pleasant things we can say about him, and although it is only a small token, I can assure you it is a great pleasure to have this plaque. I have one, and it occupies a prominent place in my office. It is a great privilege to present this token of our esteem.

DR. CLINE: Mr. Speaker, Dr. McClendon, I want to thank you for your very kind words, but more particularly I want to thank the members of the Association for the almost uniform support that has been accorded the program of the Association and the Officers of the Association this year. I think one of the most heartening things to one who has the interests of medicine sincerely at heart is the fact that medical men will stand together and will submerge self and selfish interests, and will unite hands behind a proper and constructive program. In my successor you have a man of unusual capabilities. I have had the opportunity of working with him for a great many years. As to his appeal for your guid-

ance and cooperation, I only hope that you really give him a full measure of it. You gave me an excellent measure of it, and I hope you do better by him. I know he will do better by you. Thank you very much.

SPEAKER ALESEN: It is customary to request the House to authorize the President, the Speaker, and the Secretary-Treasurer to approve the official minutes. A motion to that effect is in order. All those in favor signify by saying "aye." (General assent.) Is there any further business to come before the House? If there is nothing further, the meeting is adjourned.

(Adjourned 12:10 a.m.)

In Memoriam

ARNOUT, JOHN CLARK. Died in Los Angeles, March 14, 1948, age 70. Graduate of Creighton University School of Medicine, Omaha, Nebraska, 1907. Licensed in California in 1921. Doctor Arnout was a member of the Los Angeles County Medical Association, the California Medical Association, and the American Medical Association.

✤

KING, JESSIE ALEXANDER. Died in Ojai, March 31, 1948, age 72, after a long illness. Graduate of the St. Louis College of Physicians and Surgeons, Missouri, 1905. Licensed in California in 1921. Doctor King was a retired member of the Ventura County Medical Society, and the California Medical Association.

✤

MCLAIN, LIVA CHARLES. Died in Bakersfield, April 18, 1948, age 62. Graduate of Rush Medical College, Illinois, 1915. Licensed in California in 1916. Doctor McLain was a retired member of the Kern County Medical Society, and the California Medical Association.

✤

PATTERSON, LLOYD HOYT. Died in Los Angeles, April 5, 1948, age 38. Graduate of the University of Southern California School of Medicine, Los Angeles, 1938. Licensed in California in 1941. Doctor Patterson was a member of the Los Angeles County Medical Association, the California Medical Association, and the American Medical Association.

✤

ROWELL, HUBERT NATHAN. Died in Berkeley, April 2, 1948. age 79, after a short illness. Graduate of the Cooper Medical College, San Francisco, 1890. Licensed in California in 1890. Doctor Rowell was a retired member of the Alameda County Medical Society, the California Medical Association, and an Affiliate Fellow of the American Medical Association.

✤

TRABER, CHARLES HOLMES. Died in Reedley, March 19, 1948, age 70, of a heart attack. Graduate of Chicago College of Medicine and Surgery, Illinois, 1913. Licensed in California in 1914. Doctor Traber was a member of the Fresno County Medical Society, the California Medical Association, and the American Medical Association.

NEWS and NOTES

NATIONAL • STATE • COUNTY

BUTTE

The Butte County Hospital has entered into a contractual agreement with the California State Department of Public Health for the hospitalization of patients with syphilis.

CONTRA COSTA

Dr. Edwin W. Merrithew, who has been Contra Costa County medical officer for 34 years, will retire as county health director July 1, it was announced recently.

LOS ANGELES

Members of the Galen Club of Long Beach, which this year is celebrating its 20th anniversary, recently took time off from their more serious purpose of advancing the science of medicine to hold their annual Gridiron Banquet, at which they presented skits poking fun at themselves and their older colleagues. All members of the club are under 40 years of age. Dr. Richard Mattock is president, Dr. William Durnim vice-president, and Dr. James V. Keipp, secretary-treasurer.

* * *

Birmingham Veterans Administration Hospital on July 1 will have vacancies for four residents in medicine, three in neurology, two in psychiatry and two in pathology, Dr. E. V. Edwards, manager of the hospital, announced recently. The hospital is approved by the American Specialty Boards for residencies in each of these categories, Dr. Edwards said.

RIVERSIDE

Dr. Henry D. Stailey has been appointed acting health officer of Riverside County to take the place of Dr. Warren Fox, who resigned.

SAN BENITO

Hollister and San Juan Bautista have entered contracts for public health service by the San Benito County Department of Public Health.

SAN BERNARDINO

The city of Barstow, which was incorporated in November, 1947, recently entered an agreement putting it under the health supervision of the Health Department of San Bernardino County.

SAN DIEGO

Applications for examinations to qualify for the position of Chief of the Bureau of Preventive Medical Services of San Diego County are being solicited by the County Civil Service Commission. Salary range for the position, which is to be filled before July 1, is $587 to $647 a month.

SAN FRANCISCO

Dr. Frederick C. Cordes of San Francisco and Dr. William L. Benedict, Rochester, Minn., were elected U. S. vice-presidents of the Pan American Association of Ophthalmology at the Third Pan American Congress of Ophthalmology held in Havana, Cuba.

Announcement of three postgraduate courses to be given in San Francisco this summer and fall has been made by the University of California Medical School.

1. Internal Medicine and General Surgery, June 21-25.
2. Diseases of the Chest, with American College of Chest Physicians and Stanford University School of Medicine, September 13-17.
3. Psychiatry and Neurology, at the Langley Porter Clinic, 12 weeks, full time, August 30-November 19.

* * *

Hospitalization of a patient for treatment for Q fever, believed to be the first case of the disease reported in San Francisco, was announced recently by Dr. J. C. Geiger, San Francisco Director of Public Health. The patient, a 35-year-old white male, had been a resident of California for three years, and had traveled in Northern California. He had been in Malaya a year before hospitalization and there had had chills and fever which he took to be the result of malaria and which he treated with quinine. There was a recurrence several months later, before admission to the hospital.

* * *

A state charter has been granted to the California Academy of General Practice as a unit of the American Academy of General Practice which was founded a little more than a year ago, according to recent announcement by Dr. Francis Hodges of San Francisco, secretary-treasurer of the state chapter.

Other officers elected at the group's first meeting are: President, Dr. Ivan Heron, San Francisco; vice-president, Dr. Frederick Ewens, Los Angeles. Dr. Grant Ellis of Berkeley, Dr. Clarence Halburg of Redlands and Dr. Dave Dozier of Sacramento are members of the board of directors.

* * *

The University of California Medical School's gold-headed cane, awarded each year to the most outstanding member of the graduating class, this year went to John Vito Corbone of Roseville, California.

SANTA CRUZ

Two physicians, both veterans of World War II, have been appointed to residencies in Santa Cruz County Hospital. They are Dr. Phillip Sanfilippo, who received his degree in medicine from Creighton College in Omaha, and Dr. Elliott L. Harlow, a graduate of the University of Colorado School of Medicine. Dr. Sanfilippo served in the Navy, and Dr. Harlow in the Army.

* * *

Dr. John O. Raffety has retired as medical director of the Santa Cruz County Hospital and appointment of Colonel Robert C. Murphy, Medical Corps, U.S.A. (retired) to fill the position has been announced. Dr. Murphy told the county board of supervisors it was his intention to obtain a teaching staff for the hospital so that it may qualify as a place for training of interns in medicine.

GENERAL

Appointment of Dr. John R. Heller as director of the National Cancer Institute has been announced by the U. S. Public Health Service. He succeeds Dr. Leonard A. Scheele, the new Surgeon General. Dr. Theodore J. Bauer, formerly

venereal disease consultant for the U.S.P.H.S. in the San Francisco office, has been named chief of the Division of Venereal Diseases, the position occupied by Dr. Heller before his present appointment.

* * *

The death rate from all causes among United States life insurance policyholders reached a new low in 1947 at 737.9 per 100,000, with declines shown for practically all causes of death including heart disease and cancer, the Life Insurance Association of America reports. The 737.9 rate compares with 773.1 in 1946 and 763.9 in 1942, the previous lowest rate. These results are indicated by the experience of companies representing 73 per cent of the ordinary and industrial life insurance policies in force in all companies in the United States.

Heart diseases of all kinds constituted the leading cause of death among policyholders last year. Nearly half of all the deaths included in the survey were attributed to heart diseases, cerebral hemorrhage and nephritis. The combined death rate from these causes in 1947 was 361.5 per 100,000 policyholders. This is about 1 per cent lower than the corresponding rate in the previous year, due chiefly to improvement among industrial policyholders.

Cancer, the second leading cause of policyholder deaths, also declined during 1947, the first drop in several years. The 1947 death rate of 114.8 compares with 116.9 in the previous year and 106.8 in 1942. The death rate from tuberculosis declined to a new low of 26.1, nearly one-quarter lower than that for 1942.

* * *

Dr. Wilton L. Halverson, California State Director of Public Health, has been named to honorary life membership in the American Social Hygiene Association in recognition of outstanding service in the field of social hygiene.

* * *

The Indianapolis Medical Society announces that the following statement of policy was adopted unanimously at a meeting April 27:

"We, the members of the Indianapolis Medical Society, do hereby resolve that the welfare of the medical profession, its scientific advancement and the furtherance of public interest are continuously being harmed by organizations which demand compulsory attendance of physicians at meetings.

"To this end we instruct our duly elected delegates to the Indiana State Medical Association to introduce proper measures at the next meeting of the House of Delegates to the effect that all organizations which require compulsory attendance at their meetings no longer be approved by the American Medical Association; and, we further instruct our delegates to use their utmost influence to obtain passage of such a resolution at the earliest opportunity before the House of Delegates of the American Medical Association.

"The Indianapolis Medical Society furthermore instructs its secretary to send a copy of this resolution to every component Medical Society in the United States."

The 13th annual convention of the National Gastroenterological Association will be held at the Hotel Pennsylvania in New York, June 7-10.

* * *

The American College of Chest Physicians will hold its 14th annual meeting in Chicago, June 17-20, with headquarters in the Congress Hotel.

* * *

The report of Proceedings of the Fourth International Congresses on Tropical Medicine and Malaria, held in Washington, D. C., May 10-18, is expected to be published about January 1, 1949, the U. S. Department of State announced. Copies may be ordered from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C. The price per copy has not yet been determined.

* * *

The American Congress of Physical Medicine will hold its 26th annual scientific and clinical session September 7-11, at the Hotel Statler, Washington, D. C. All sessions will be open to members of the medical profession in good standing with the American Medical Association. In addition to the scientific sessions, the annual instruction courses will be held. Full information may be obtained by writing to the American Congress of Physical Medicine, 30 North Michigan Avenue, Chicago 2, Illinois.

* * *

A Section on Allergy, to be known as the California Society of Allergy, which will hold scientific meetings as a part of the program of the annual sessions of the California Medical Association, was established at the time of the C.M.A. meeting last April in San Francisco. Dr. Willard S. Small was elected temporary chairman of the Section, and Dr. Frank G. Crandall, Jr., temporary secretary. Officers of the Society, also elected at the meeting, are Dr. George Piness, president; Dr. Albert H. Rowe, vice-president; Dr. Crandall, secretary; and Dr. Milton M. Hartman, treasurer.

* * *

Dr. Harold M. F. Behneman, Palm Springs, was elected president of the California Society of Internal Medicine at the annual meeting of that organization in San Francisco last April. Dr. H. Gordon MacLean of Oakland was elected vice-president, and Dr. Donald Carson of San Francisco, secretary. Councilors elected are Dr. Lewis Bullock, Los Angeles County; Dr. DeWitt Burnham, San Francisco; Dr. Gurth E. Carpenter, Los Angeles County; Dr. Earl O. G. Schmitt, Santa Clara County; and Dr. Neville T. Ussher, Santa Barbara County.

The Society announced that the following Doctors who are in a retired status and who have contributed to medicine in California were elected to honorary membership: Thomas Addis, San Francisco; George Blumer, Pasadena; Robert N. Bramhall, Fair Oaks; Charles Miner Cooper, San Francisco; George Dock, Pasadena; Donald Jackson Frick, La Verna; Robert Langley Porter, San Francisco; Herbert C. Moffitt, San Francisco; Ray Lyman Wilbur, Stanford University.

INFORMATION

ATS States Policy on BCG

Vaccination with BCG does not provide complete protection against tuberculosis and, until further controlled studies are conducted, cannot be recommended for the general population. However, since it appears to provide some degree of protection, its use is recommended for members of groups constantly exposed to tuberculosis if they have a negative reaction to the tuberculin test.

These conclusions are contained in a report submitted by the Chemotherapy Committee of the American Trudeau Society, Medical Section of the National Tuberculosis Association, to the ATS Executive Committee in January, and adopted by the latter as a statement of policy on BCG.

The complete report follows:

The members of the Society and other physicians in the United States have been interested for many years in the active immunization against tuberculosis with BCG. The expansion of public health activities in the field of tuberculosis control by official and voluntary agencies and the acquisition of new knowledge concerning immunity in tuberculosis have prompted the American Trudeau Society to make the following observations and recommendations:

I. BCG vaccine, prepared under ideal conditions and administered to tuberculin negative persons by approved techniques, can be considered harmless.

II. The degree of protection reported following vaccination is by no means complete nor is the duration of induced relative immunity permanent or predictable. The need for further basic research on the problem of artificial immunization against tuberculosis is recognized and is to be emphasized. Studies should be directed: (a) toward the improvement of the immunizing agent, (b) to the development of criteria for vaccination and revaccination and (c) to determine more accurately which groups in the general population should be vaccinated. Several well controlled studies are under way at the present time and it is expected that others will begin within the near future.

III. On the basis of studies reported in the European and American literature, an appreciable reduction in the incidence of clinical tuberculosis may be anticipated when certain groups of people who are likely to develop tuberculosis because of unusual exposure, inferior resistance, or both, are vaccinated.

A. In the light of present knowledge, vaccination of the following more vulnerable groups of individuals is recommended, provided they do not react to adequate tuberculin tests.

1. Doctors, medical students and nurses who are exposed to infectious tuberculosis.

2. All hospital and laboratory personnel whose work exposes them to contact with the bacillus of tuberculosis.

3. Individuals who are unavoidably exposed to infectious tuberculosis in the home.

4. Patients and employes of mental hospitals, prisons and other custodial institutions in whom the incidence of tuberculosis is known to be high.

5. Children and certain adults considered to have inferior resistance and living in communities in which the tuberculosis mortality rate is unusually high.

B. Vaccination of the general population is *not* recommended at this time except for carefully controlled investigative programs which, as a rule, will be best carried out under the auspices of official agencies such as the U. S. Public Health Service, state and municipal health departments and other especially qualified groups.

IV. BCG vaccine should not be made available for general distribution in the United States at this time because: (a) the most effective strain of BCG has not been agreed upon nor has fully satisfactory standardization of the vaccine been achieved, (b) the best qualified experts have not agreed as to the most effective method of vaccination and (c) fully satisfactory arrangements have not been perfected for transportation and storage of the vaccine.

The vaccine should be prepared only in accredited laboratories especially devoted to this task, in which virulent tubercle bacilli are not cultivated or handled and in which all other possible precautions are exercised to assure safety and quality of the product.

Adequate record systems should be devised for management of the statistical problems involved in recording and following large numbers of vaccinated people. These and other problems of particular importance are now being studied on an extensive scale by official and voluntary agencies in the United States and in close collaboration with European scientists experienced in this field.

V. The Society believes that since BCG vaccination affords only incomplete rather than absolute protection, the most effective methods of controlling tuberculosis in the general population are: (a) further improvement of living conditions and the general health, (b) reduction of tuberculosis infection, which can be accomplished by modern public health methods and the unremitting search among presumably healthy individuals for patients with infectious tuberculosis, (c) prompt and adequate medical and surgical treatment of patients with active disease, (d) segregation and custodial care of those not amenable to accepted forms of therapy and (e) adequate rehabilitation.

SIGNIFICANT ADVANCES

Fortunately, great advances have been achieved during recent years in the development of diagnostic methods applicable on a mass scale and there have been significant improvements in the surgical and medical treatment of tuberculosis. The expansion of modern diagnostic, therapeutic and rehabilitation

facilities is required at this time to make full use of these new methods which can accomplish further dramatic reduction of tuberculosis mortality and morbidity rates in the United States.

It is to be emphasized that BCG vaccination must not be regarded as a substitute for approved hygienic measures or for public health practices designed to prevent or minimize tuberculous infection and disease. Vaccination should be regarded as only one of many procedures to be used in tuberculosis control. Vaccination seems unwarranted: (a) in areas in which the tuberculosis mortality rate is extremely low and (b) in localities in which the tuberculin test is of especial value as a differential diagnostic procedure.

Irwin Memorial Blood Bank

Although the total number of donors accepted by the Irwin Memorial Blood Bank of San Francisco in 1947 was 21.5 per cent greater than the total for the preceding year, more are needed to fill increasing demands, according to a report signed by Anthony J. J. Rourke, M.D., chairman of the Physicians of the Blood Bank Commission.

The Bank, which was founded in 1941 by the San Francisco County Medical Society, is operated as a non-profit organization to provide transfusion service to over 55 hospitals serving a population of more than one and a half million in San Francisco and Marin Counties. Recently the Bank has received an increasing number of requests to extend the service to other areas.

Purposes of the Blood Bank are:

1. To provide whole blood and plasma at cost to patients in need of such therapy.

2. To be certain blood transfusions were available for all patients regardless of their ability to pay the service fee or provide donor replacements.

3. To process and distribute plasma to ships of allied nations and in addition to create a plasma reserve for the people of San Francisco.

In serving these purposes, the Bank at present is taking blood from between 1,900 and 2,000 donors a month and distributing over 1,800 units of whole blood and plasma to hospitals. In 1941 when blood was procured from 200 donors and hospitals were requesting 50 to 100 units a month for patients.

The management of the Blood Bank sets forth the following ways by which a fresh, adequate supply of blood can be maintained through donations:

1. *Bank Deposits.* Donors may deposit blood to aid the Bank and its humanitarian work. These deposits help keep a surplus in the refrigerator for patients in need. A donor contributing to the "Bank" is given a credit for a period of one year and during that time, the credit is available for relatives or friends as replacement for blood provided by our Bank upon the authorization of the donor.

2. *Reserve Funds.* Many business firms, societies and fraternal organizations are encouraging members to start a Reserve Fund with the Blood Bank. All deposits to a Reserve are held for a period of one year and when any member of the organization or his immediate family is in need of a transfusion, the replacement is debited from the Fund upon the authorization of the Reserve Fund Chairman. Funds are kept active by the regular periodical donations of the members; and, in this way, stocks of fresh blood are materially aided. This worthwhile plan has great appeal and the Bank directors ask your cooperation and assistance in encouraging Reserve Funds.

3. *Hospital Replacements.* Donors deposit blood to replace units supplied patients having blood transfusion therapy in local hospitals.

Not every donation given to the Bank may be used. The Bank occasionally suffers losses as indicated below:

1. Not every donor can give a full pint of blood, yet full credit is given.

2. All blood drawn does not meet the standards of our laboratory tests, although full credit is given the donor.

3. The Bank must stock all four types of blood, yet does not specify the donor must be a certain type when making replacements. Often the donor does not have the type immediately required by the Bank, making it necessary to have additional donations.

The Irwin Memorial Blood Bank does not buy or sell blood. When blood is supplied to a patient by the Bank, a service fee of $6 is charged for each unit of whole blood provided. This is the actual cost of drawing, preparing, packaging and transporting the blood from the Irwin Memorial Blood Bank to the hospital. In addition to this service fee, each unit of blood withdrawn from the Bank must be replaced in order that blood may be available for other patients in need of transfusion. To insure a blood donor replacement, the hospital charges the patient a $25 "professional donor fee" for each unit, making the total cost of transfusion $31. In order that the $25 professional donor fee may be refunded to the patient, the blood must be replaced by the *patient's family or friends*, or by a *previously established Reserve Fund or Bank credit.* Should this procedure not be followed, the hospital must pay a donor the professional fee to make the replacement and the patient, therefore, forfeits all claim to a refund. The Blood Bank, the hospital and the patient's physicians encourage voluntary replacements in order that the patient may take advantage of a transfusion for the low cost of $6. This replacement plan constitutes a great monetary saving that was not possible in the time before non-profit Blood Banks were in operation and the cost of transfusions was often $50 to $75.

To keep the Bank in operation, the services of a paid staff of 28 professional and technical employees are required. In addition, a corps of 65 volunteers per week is needed to deliver blood to the hospitals, prepare sterile supplies, serve in the canteen and act as hostesses. New recruits to the volunteer group are sought. Persons desiring to donate their services are requested to telephone the Blood Bank. Donors also are needed. The number is WAlnut 1-5600.

BOOK REVIEWS

PRACTICAL OFFICE GYNECOLOGY. By Karl John Karnaky, M.D., Assistant Professor of Clinical Gynecology, Baylor University College of Medicine. Charles C. Thomas Publishers. Price, $7.50.

Karnaky calls this tome of 224 pages a "practical gynecology" and as judged by the ambitious table of contents at the head of each of the sixteen chapters it is meant to serve as a quick reference guide to the principles and practices of gynecologic therapy. Yet, Karnaky devotes nearly half of his monograph to the discussion of his impressions and experiences with stilbestrol as he has used this and kindred substances in the treatment of a variety of gynecologic disorders. No doubt much of this is valuable information offered with zealous finality by an unorthodox clinical experimenter, yet in the mind of the reviewer who has read this controversial tome three times there arises doubt that such finality of opinion is indicated at this stage of our knowledge of female endocrinology. If the book were called an account of personal experiences in gynecologic therapy there could be no question as to its intent and purpose but its present title presupposes a more inclusive discussion of the subject matter. The author is a great believer in the use of stilbestrol which evidently he uses to cure most diseases of the female generative system. He cites figures which though often not controlled are impressive, to say the least, and because by oversimplifying his subject his statements read convincingly. Karnaky discusses all the phases of stilbestrol therapy, their action and advantages but is little concerned with the disadvantages which, he says, will be overcome if the substance is used consistently. He advises the use of huge doses of stilbestrol or kindred substances for the control of so-called functional bleeding and he is of the opinion that none of these substances bears directly on pelvic cancer though he warns against their use in suspected breast and endometrial cancer. All of this and much more will make interesting reading for the discriminating practitioner.

The book also contains good information on vaginal cytology, the meaning and interpretation of vaginal pH, the various methods used in determining ovulation and their relative merits, newer aspect in the study of sterility and vaginal trichomoniasis. The chapters on genital tract infections, disorders of the cervix, dysmenorrhea, uterine displacement and tubo-ovarian disorders have been treated rather too briefly unless the particular therapy is concerned with the use of stilbestrol. The last chapter of the book is devoted to a brief discussion of the psychologic aspects of gynecology. It did not impress the reviewer as being adequate in its scope and presentation.

Karnaky's monograph is pleasingly presented and extensively illustrated. Colored plates have been used extravagantly, though many will be familiar to the reader of pharmaceutical advertisements.

* * *

THE DOCTOR IN OREGON. By O. Larsell, Professor of Anatomy, University of Oregon Medical School. Published by Binfords and Mort for the Oregon Historical Society, Portland, Oregon. Price, $10.00.

This is a most complete and well-documented history of medicine in Oregon from the time of the Indian shaman to the present decade.

Unlike many histories—so often a boring compilation of biographies—this is very enjoyable reading, made so by descriptions of disease and trauma encountered in the practice of medicine during periods of explorer, teacher, missionary and pioneer. Case histories and authentic anecdotes bring life to the mass of factual data presented.

Subsections are devoted to societies, journals and schools in Oregon, and to the development of hospitals and public health activities.

We owe a debt of gratitude to Dr. Larsell for this record of medical evolution in a state which can well be proud of its doctors' achievements.

* * *

MANUAL OF CLINICAL THERAPEUTICS. By Windsor C. Cutting, M.D., Professor of Therapeutics, Stanford University of Medicine, San Francisco. Second Edition, Illustrated. W. B. Saunders Company, Philadelphia and London. 1948.

The popular pocket-sized manual has just been revised in this second edition of 712 pages. The print is large and the subject matter made easy to read by the direct and simple style of the author.

The general problems of treatment are first discussed by Dr. Cutting. Then he discusses categorically the problems of treatment of the various diseases. These treatments are clearly and honestly outlined. Several therapy is considered, and if pertinent to the case, specific and preventive measures are added. Good and worthless procedures are indicated. Metric measurements are given preference throughout the text. Apothecaries' measures are included in dosage tables and prescriptions in the appendices.

The treatments are brought up to date with the newer antibiotic and chemotherapeutic agents.

Many pertinent charts, tables, prescriptions, drug doses, diets and medical procedures are well chosen.

This manual is highly recommended to all medical students and practitioners because of its authoritative character.

* * *

THE YEARS AFTER FIFTY. By Wingate M. Johnson, M.D., Professor of Clinical Medicine and Chief of Private Diagnostic Clinic, Bowman Gray School of Medicine of Wake Forest College. Whittlesey House, McGraw-Hill Book Company, Inc., New York-London. Price, $2.00.

In The Years After Fifty, Dr. Johnson writes as an experienced doctor, discussing with his patients the assets and liabilities of maturity. In simple terminology he explains the physiological processes active in health and disease, presenting the problems realistically, yet in a manner to avoid undue alarm. Interspersed throughout are sympathetic expressions of the author's philosophy of living. Such a book as this one should prove valuable to recommend to patients desiring a simplified explanation of the medical problems occurring because of advancing age and serve to clarify misconceptions and allay the fears of those who are confused by the welter of pseudo medical information disseminated by word of mouth and by the lay press.

* * *

A MANUAL OF OTOLOGY, RHINOLOGY AND LARYNGOLOGY. By Howard Charles Ballenger, M.D., F.A.C.S., Associate Professor of Otolaryngology, Northwestern University School of Medicine, Chicago, Illinois. Third Edition, enlarged and thoroughly revised. Published 1947. Octavo, 352 pages, with 135 illustrations and 3 color plates. Cloth, Lea & Febiger, Philadelphia. Price $4.50.

This is not a first rate book but it may have some usefulness as a catalogue of ear, nose, and throat conditions. It is less expensive and takes up less room than most texts.

Despite "thorough revision" its general tone is that of the nineteen twenties. A gesture is made toward modern thinking by somewhat fuller mention of allergy, the sulfonamides, antibiotics and the newer procedures of the specialty such

as fenestration, irradiation of the nasopharynx, and operations for vocal cord paralysis. There is a short chapter on headache and facial neuralgia. However, the orientation is that of a by-gone era. It would seem that for medical students' use it would have been better to have made a fresh start than to have attempted this revision, which perpetrates the bad along with the good from the past.

* * *

ADVANCES IN MILITARY MEDICINE, made by American Investigators working under the sponsorship of The Committee on Medical Research. Edited by E. C. Andrus, D. W. Bronk, G. A. Carden, Jr., C. S. Keefer, J. S. Lockwood, J. T. Wearn, M. D. Winternitz. Volumes I and II with Illustrations. An Atlantic Monthly Press Book. Little, Brown and Company, Boston. $12.50 per volume.

This two-volume work is a significant contribution to the medical literature and represents a summary of the results of the great cooperative effort in medical research conducted by the Office of Scientific Research and Development, via its Committee on Medical Research. Much of the definitive data forming the basis of this review have been published, and in the foreword Alfred N. Richards, chairman of the Committee on Medical Research, states that already more than thirteen hundred papers describing specific aspects of the work have been published. The magnitude of the bibliography is also reflected in the seventy-six pages of references published under OSRD/CMR contract.

A history of the experiences of the CMR is outlined in Dr. Richards' foreword; he states that contracts were entered into with 135 universities, hospitals, research institutions and industrial firms, with an expenditure of approximately 25 million dollars. The fields of research were quite broad and included the problems of infectious diseases, experimental medicine, aviation medicine, nutrition, chemical warfare, anti-pest agents, antibiotics, etc.

The data presented in the various papers are authoritative and give an excellent summary of the medical advances under CMR contract. The information provided is too extensive for detailed review and only a few observations will be noted. Dr. Lockwood, in the section on surgery, emphasizes the fact that the outstanding accomplishments in military surgery during the war were the improvements in surgical resuscitation made possible by the availability of blood and plasma for transfusion in the forward areas, coupled with early surgical intervention.

The problem of frost-bite and trench foot was very real during World War II and Crismon states that the Finnish army reported five thousand cases of frost-bite in January of 1939, and that two to three million German soldiers in Russia were incapacitated by cold during the winter of 1942-43.

The advantages of pressure breathing in anoxia are clearly shown in the chapter by Millikan. An excellent discussion of shock by Richards, Fine, and Long is very profitable. Richards emphasizes the fact that the most striking discovery, of most practical significance, was that in shock following trauma, the decrease in blood volume is regularly associated with hemodilution, that the loss from the circulation is from whole blood and that it occurs at the site of injury. The estimate of the amount of blood lost in moderate and severe shock was found to be of the order of 1,500 to 2,000 c.c. of whole blood, or 30-40 per cent of the circulating blood volume. These data indicated that for sustained recovery from shock, the transfusions of large amounts of blood (preferably whole blood) was required. Long summarizes the important data concerning the effects of shock upon the kidneys and emphasizes the importance of early and adequate transfusion, so that the blood volume is restored as soon as possible. Once the secondary effects of prolonged exposure to a reduced blood volume have appeared, the treatment becomes progressively more difficult and if delayed too long, becomes impossible.

One of the most important and best-documented papers in the study is that of Cohn on the history of plasma fractionation; it is one of the most complete discussions of the subject available.

The tremendous labor expended on the problem of malaria and new insect repellents is impressive. Thousands of new synthetic candidate repellents were prepared and studied. The majority of these were entirely new compounds never before synthesized. The value of the new repellents in mosquito control can be summarized by noting that they were ten times as effective as the pre-war oil of citronella, and that in the liquid form for skin application, these new repellents were 100 per cent effective for over three hours. The magnitude of the clinical testing of anti-malarial drugs was revealed by Shannon's statement that about 14,000 compounds were surveyed for activity in avian malaria. The data on chloroquine and oxychloroquine are briefly discussed.

The chapter on penicillin by Keefer is a dramatic portrayal of the war-time achievements of our pharmaceutical firms. Keefer demonstrates the progress in the availability of penicillin by his statement that in the summer of 1941, there was not enough penicillin in this country to treat a single patient; in the spring of 1942, a sufficient amount had been produced to treat a single patient adequately; in 1943, wounded Pacific veterans received penicillin; and finally, by V-day, there was enough penicillin available for our armed forces, our allies, and, in a moderate amount, for civilians.

In addition to the valuable scientific information available in this two-volume work, one cannot help noting the splendid results that were accomplished in a short space of time by the cooperative efforts in all the medical sciences by the government, private industry, and university groups, including nearly 1,700 doctors and 3,800 scientifically trained researchists. The combined efforts, although the result of the exigency of war, clearly demonstrate the potentialities of such coordination of varied groups for peace-time needs. It is to be hoped that future cooperative research along the lines described in this book will continue, even though the war is over.

The two volumes can be very highly recommended to all physicians and scientists.

* * *

BLOOD PRESSURE AND ITS DISORDERS INCLUDING ANGINA PECTORIS. By John Plesch, M.D., Budapest; M.D., Germany. Second Edition revised and enlarged. The Williams and Wilkins Co.

In general, the ideas expressed in this book are not in harmony with current concepts.

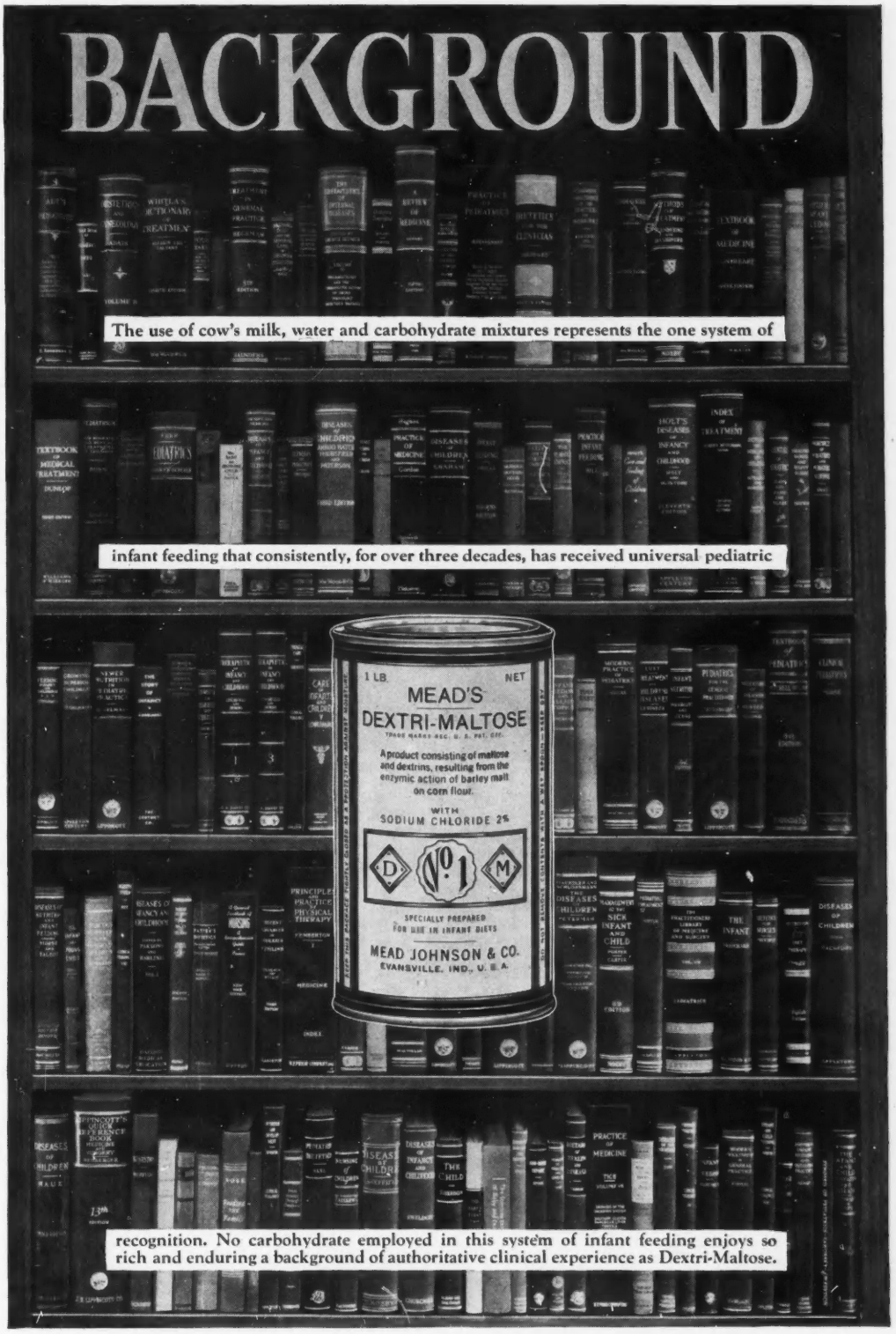
* * *

PRACTICAL CHILD GUIDANCE AND MENTAL HYGIENE. By Samuel Kahn, M.D., Ph.D., Adjunct Professor of Psychology and Psychiatry at Long Island University—Grace Kirsten, A.B., formerly with the New York City Department of Education—and May Elish March, A.B., M.A., formerly a teacher in the New York City High Schools. Meador Publishing Co. $4.00.

This book is unique in that it is almost entirely in the form of questions and answers; the only exceptions are the short paragraphs at the beginning of each chapter. The questions are grouped according to subject matter into 24 chapters. A few titles of chapters will reveal the type of questions answered such as "Children and Jealousy," "Security and Insecurity," "Money in Childhood," "Sex in Childhood," "Overprotection and Underprotection."

The book obviously was written primarily for non-medical individuals dealing with children, namely parents, teachers, nurses, and social workers. However, the physician especially who, without the latest pediatric training must deal with children, will find it useful, for certainly practically every posed question is answered.

BACKGROUND



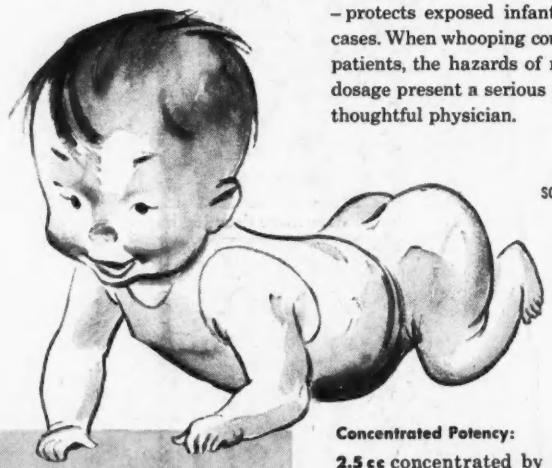
LOS ANGELES OFFICE, 737 Terminal St., Telephone VAndike 4309
SAN FRANCISCO OFFICE, 670 Third St., Telephone DOuglas 2-5089

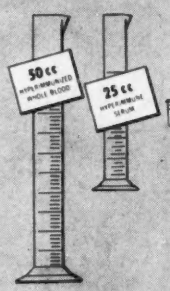
A thimbleful of dosage...

for a handful of baby . . . 2.5cc HYPERTUSSIS

concentrated human anti-pertussis globulin – protects exposed infants – treats critical cases. When whooping cough attacks small patients, the hazards of massive repeated dosage present a serious problem to every thoughtful physician.

2.5 cc Hypertussis provides the specific solution for therapy or passive prevention. The advantages are evident:





2.5cc HYPERTUSSIS

highly concentrated and purified gamma globulin of pooled human serum from healthy donors hyperimmunized with Super-Concentrate Phase I Pertussis Vaccine

The Specific Cutter Blood Fraction for Whooping Cough...

Concentrated Potency:

2.5 cc concentrated by fractionation to contain the antibody equivalent of 25 cc hyperimmune human serum.

2.5 cc delivers consistent gamma globulin potency in constant measured doses.

Small Volume Dosage:

2.5 cc concentrated gamma globulin reduces dosage volume 75% – minimizes injection trauma – permits repetition when required.

Homologous, sensitivity-free:

2.5 cc clear liquid homologous protein, Hypertussis is ready for intramuscular injection – avoids danger of reactions and serum sensitivity.

For 10-fold concentration in small volume dosage – specify ***CUTTER 2.5cc HYPERTUSSIS***
Anti-Pertussis Serum (Human)

CUTTER LABORATORIES • BERKELEY, CALIFORNIA